

**Imperial Oil Limited  
Waterdown to Finch Pipeline Project**

**Application for Leave to Construct a Hydrocarbon  
Distribution Pipeline and Ancillary Facilities in the City of  
Hamilton, the City of Burlington, the Town of Milton, the  
Town of Oakville, the City of Mississauga and the City of  
Toronto EB-2019-0007 -**

**The Regional Municipality of Halton Interrogatories to  
Imperial Oil**

**July 15, 2019**

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This Information Request incorporates and adopts the input from other municipalities including the City of Toronto, the Regional Municipality of Peel, the City of Mississauga and the Toronto and Region Conversation Authority.

**1. Purpose, Need, Proposed Project and Timing**

**Reference:** EB-2019-0007 – Imperial Oil Limited’s Leave to Construct Application filed 2019-02-22 (“Application”) Exhibit C, Tab 1, Schedule 2, Page 3, Figure 2.2-1: Waterdown to Finch Project Overview.

As illustrated by Figure 2.2-1, the Project proposes to cross the following Regional roads: Guelph Line, Appleby Line, Tremaine Road, Regional Road 25, Neyagawa Boulevard (future northerly extension), Trafalgar Road and Ninth Line.

**Request:**

- a. Please explain how Imperial Oil Limited (“**Imperial**”) or its contractors will allow and address any future widening of Regional roads within the Project corridor?
- b. Specifically, how is Imperial ensuring that the location and construction of the pipeline does not impact future widening activities (during construction and post-construction) such that the pipeline Project does not impede or restrict The Regional Municipality of Halton’s (“**Halton**”) ability to carry-out any future widening of Regional roads, including the future extension of James Snow Parkway to Neyagawa Boulevard which appears to cross the proposed pipeline? This would mean accounting for Regional roads being widened from 2 to 4 lanes or from 4 to 6 lanes, and resulting new road alignment, in addition to ultimate Regional right-of-way along the relevant sections of road (as per Halton’s Official Plan, Transportation Master Plan and/or Environmental Assessment Study/Detail Design Study). For information, Halton Region’s Transportation and Development and Non Development Capital Implementation Plan (2018-2031) is available on Halton’s website.
- c. Has the future Halton infrastructure project outlined in the Sustainable Halton Water and Wastewater Master Plan (2011), which appears to cross the proposed pipeline route, been considered as part of the Project study? Halton Region Project ID 6666 (planned construction start in 2031), a new 750 mm watermain to be constructed on Neyagawa Boulevard and the

future extension of James Snow Parkway from Burnhamthorpe Road to Lower Base Line West?

- d. Please provide details of the proposed plan and profile drawings along the proposed Neyagawa Boulevard alignment. These details are required to ensure adequate protection of both the proposed pipeline and the proposed 750 mm watermain.
- e. Please provide details of the proposed plan and profile drawings along Trafalgar Road and Ninth Line. Although these roads fall under MTO jurisdiction and review, Halton has significant infrastructure in these areas and needs to ensure its protection.

## **2. Land Matters**

**Reference:** Application, Exhibit F (Land Matters), Tab 1, Schedule 1, Page 1 of 6, Summary of Land Matters, Paragraph 4

**Reference:** Tab 1, Schedule 6, Pages 1-143, Table 6-1: Land Line List

Table 6-1 is described as a Line List and sets out a list of properties that are impacted by the Project, along with associated Property Identification Numbers (PINs) and other property information. Portions of this table, specifically the columns entitled “Landowner (Geowarehouse)” and “Mailing Address”, have been redacted.

Halton needs to have comprehensive information as to which Halton-owned properties may be impacted by the Project. Geowarehouse and/or the Land Registry Office may not show Halton as the owner of all Halton-owned properties, as Halton obtained ownership of certain lands through amalgamations, mergers and other municipal boundary adjustments from several smaller communities. As such, Halton is seeking information for impacted properties for which any of the entities listed below is recorded in Geowarehouse/LRO as owner.

In addition, Halton has pulled several of the PINs listed in Table 6-1 in Geowarehouse and found that they are inactive. Where PINs are inactive Halton needs to be provided with the new PIN.

### **Requests:**

- a. Please provide a complete and unredacted Land Line List table, including all of the categories of information set out in Table 6-1, for all of the following properties:

i) properties for which any of the following landowners are recorded on title:

- The Regional Municipality of Halton
- The Corporation of the Regional Municipality of Halton
- Township of Trafalgar
- Township of Nelson
- The Corporation of the City of Burlington
- The Corporation of the Town of Oakville
- The Corporation of the Town of Milton
- The Corporation of the Town of Halton Hills
- Township of Esquesing
- Public Authority Having Jurisdiction

ii) properties that are in any of the following municipalities:

- Burlington
- Oakville
- Milton

iii) Properties for which the “Property Type” is either of the following:

- Municipal (Public Road)
- Municipal (Surplus Lands)

iv) Under the table heading “PIN”, please also state whether the PIN is active or inactive and, if inactive, please provide the new PIN.

v) Please confirm that the information provided in response to this question is a complete list of properties that will be impacted by the Project.

### **3. Emergency Response**

#### **3.1 Record of Consultation**

**Reference: Application, Exhibit H, Tab 1, Schedule 1, Pages 5**

**Reference: Application, Exhibit H, Tab 3, Schedule 1, Pages 4, 29, 35 and 37**

Imperial states that it invited communities to participate in an Emergency Response Exercise. Imperial also indicates that Halton, the City of Burlington, the Town of Milton, and the Town of Oakville were specifically invited to attend the exercise.

When asked to supply an Emergency Response Plan, Imperial's initial reply was that all Halton area Emergency Management Departments would be invited to attend its Emergency Response Exercise. No Emergency Response Plan was circulated and thus there was no ability to measure the efficacy of response processes during the exercise. Without the relevant plan, Imperial's invitation was considered incomplete and it did not justify Halton staff attendance. An invitation to attend an exercise is not a substitute for providing a valid, detailed, and specific Emergency Response Plan.

**Request:**

- a. Please provide an Emergency Response Plan that includes the previously requested information (see 3.1 below for additional information as to information requested).

**3.2 Emergency Response Plan**

**Reference: Application, Exhibit H, Tab 2, Schedule 6, Page 13**

**Reference: Meeting with Imperial Oil June 27, 2018 and e-mail request of May 1, 2019.**

Imperial indicates that its Emergency Response Plan prioritizes the protection of people and the environment.

During Halton's meeting with Imperial on June 27, 2018, Halton Emergency Management requested a copy of Imperial's Emergency Response Plan, in order to understand Imperial's process for notifying local agencies and affected parties and sharing information with respect to an emergency situation. Halton was also seeking to understand what emergency response responsibilities normally assumed by Halton or other emergency service providers would be assumed by Imperial in responding to a pipeline-related incident.

This request was reiterated in email correspondence to Imperial from Halton Emergency Management dated May 1, 2019. In response, Imperial provided some detailed information as to planned mitigation practices and spill control methods. This information did not, however, include the details with respect to incident notification, information sharing and assumed responsibilities. On June 25, 2019, Imperial provided Halton with an Emergency Response Plan. The Plan still does not include the requested information relating to incident notification, information sharing and assumed responsibilities.

**Requests:**

- a. What is the status of an Emergency Response Plan that includes details with respect to incident notification, information sharing and emergency response responsibilities that will be assumed by Imperial and when will the updated Plan be provided to the Region?
- b. Please confirm that Imperial will provide a representative to participate in a Regional or Local Emergency Operations Centre during an emergency event requiring the activation of a municipal Emergency Operations Centre.

**3.3 Financial Resources**

**Reference: Application, Exhibit H, Tab 1, Schedule 1, Page 8**

Imperial states:

*Imperial takes proactive safety measures to prevent spills. Imperial has a robust Emergency Response Plan. Regulations and government oversight dictate how Imperial prepares for and responds to a potential pipeline spill. Imperial would be responsible for cleaning up and mitigating damages.*

In the event of a pipeline-related emergency incident, a large number of residents, properties and/or businesses could be impacted. The costs associated with recovery from such impacts are potentially significant.

**Request:**

- a. Please provide explicit confirmation that Imperial has the financial resources (including but not limited to insurance coverage) to pay for remediation costs, fines and penalties, among other costs associated with a pipeline-related emergency.

**4. Environmental Report**

**4.1 Clean up and Reclamation**

**Reference: Application - Environmental Report, Section 2.3: Project Construction Methods, Page 2-2**



The Report states:

*8. Clean-up and Reclamation: The ROW and temporary workspace (TWS) are reclaimed or restored to natural or pre-construction contours, and the native topsoil is replaced. In natural areas, restoration includes re-seeding the disturbed areas. In developed areas, restoration involves leaving the site in a condition suitable to resume agricultural activity or urban landscaping.*

**Request:**

- a. Please confirm that restoration includes compensation and other activities in accordance with the Environmental Protection Plan and/or Reclamation Plan.

**4.2 Agricultural Areas**

**Reference:** Application - Environmental Report, Section 4.1.1: Study Areas, Page 4-2 (Table 4.1-1: Local Study Areas Defined by Feature)

**Reference:** Application - Environmental Report, Section 4.4.1: Land Use Planning, Page 4-26

Table 4.1-1 does not set out a local study area relating to agriculture. Additionally, Section 4.4.1 of the Report states:

*Infrastructure should also avoid prime agriculture areas where possible. Only linear infrastructure is to be developed in prime agricultural areas and is subject to an agricultural impact assessment or equivalent analysis.*

An Agricultural Impact Analysis (AIA) has not been provided as part of the studies submitted to Halton. There are sections in the Environmental Report that discuss agricultural lands, however there is no complete assessment of the impacts this Project could/will have on the agricultural system and possible mitigation measures. Impacts that are discussed throughout the report do not consider the long term effects of disturbing the soil ecosystem.

**Requests:**

- a. Please include agricultural area as a feature with a local study area in Table 4.1-1.
- b. Please provide an assessment of the impact of the Project on agriculture (i.e. an Agricultural Impact Assessment).

#### 4.3 Woodlands

**Reference:** Application - Environmental Report, Section 4.3.1.3: Woodlands, Pages 4-16 & 4-17

**Request:**

- a. Why is there is no figure provided showing woodlands and significant woodlands? Please provide a figure showing *woodlands* and *significant woodlands*. Within the Halton Region portion of the Project corridor, these features should be identified in accordance with the definitions contained in the Halton Region Official Plan (Sections 295 and 277).

#### 4.4 Mapping from Regional Official Plan

**Reference:** Application - Environmental Report, Section 4.4.2: Existing Land Use, Page 4-28

The Report states:

*Official Plan for the Regional Municipality of Halton: This outlines a long-term vision for Halton's physical form and community character, as well as policy positions to be required in the Official Plans and Zoning By-laws of Burlington, Oakville, Milton and Halton Hills. The Region provides direction on matters such as management of land and natural resources, housing development, provision of services, community growth and economic development. Local municipalities direct development in accordance with local desires while adhering to the overall planning vision for Halton and policies of the plan (Halton 2018).*

**Request:**

- a. Why does the Environmental Report not include mapping from the Halton Official Plan? Please include in the Environmental Report a description of Halton Region Official Plan (ROP) designations and overlays that apply to the Project corridor, including but not limited to Regional Natural Heritage System (RNHS) designation, Greenbelt Natural Heritage System (GBNHS) overlay and Agricultural Area designation. The Environmental Report mentions the ROP, but makes no mention of the Natural Heritage System lands within the Project corridor. The RNHS and GBNHS should be described in Section 4.4.2 (Existing Land Use) as ROP designations and overlays that contain important

environmental protection polices which should be considered in relation to impact avoidance and mitigation.

#### 4.5 Tile Drainage

**Reference:** Application - Environmental Report, Section 5.2.2: Soil, Pages 5-3 & 5-4

The Report states:

*Drain tiles are subsurface structures used in some agricultural areas to improve the productivity of the land by increasing drainage of soils. Drain tile damage could occur by operation of heavy construction equipment causing rutting in wet soils, and during excavation of the pipeline trench, as most drain tiles are installed at a depth shallower than the planned trench depth. Imperial will consult with landowners prior to construction to identify and/or repair any drain tiles or irrigation systems that would be affected by the Project.*

**Request:**

- a. Please confirm that Imperial will identify land parcels with tile drainage and the location of drain tiles in advance of construction in order to avoid damage and to minimize any negative long term impacts.
- b. Please refer to and incorporate the Ontario Ministry of Agriculture, Food and Rural Affairs tile drainage records that can be downloaded to determine what areas may be susceptible to drain tile damage before construction is commenced. Tile drainage plays a valuable role in the agricultural system, causing water to drain from the land thereby impacting productivity and yields.

#### 4.6 Agricultural Soils

**Reference:** Application - Environmental Report, Section 5.2.2: Soil, Page 5-4 and Page 5-5 (Table 5.2-2: Potential Effect, Key Mitigation Measures, and Net Effects on Soil)

The Report states:

*Soil compaction modifies the structure and reduces the porosity and moisture-hosting capacity of soils. Construction equipment travelling over wet soils could disrupt the soil structure, reduce pore space, increase runoff potential, and cause rutting. The degree of compaction depends on*

*moisture content and soil texture. Fine-textured soils with poor internal drainage that are moist or saturated during construction are the most susceptible to compaction and rutting. Compaction impacts will be mitigated through the use of deep tillage operations during restoration activities using a paraplough or similar implement. In areas where topsoil segregation occurs, plowing with a paraplough or other deep tillage implement to alleviate subsoil compaction will be conducted before replacement of the topsoil.*

*Clearing, grading, and equipment movement could accelerate the erosion process and, without adequate protection, result in discharge of sediment to waterbodies and wetlands. Soil loss due to erosion could also reduce soil fertility and impair re-vegetation. Temporary erosion controls will be installed prior to initial ground disturbance and maintained throughout construction. Imperial will complete final cleanup as soon as practical after construction, weather and soil conditions permitting. In no case will restoration of an area be delayed beyond the next available seeding season. Except in active agricultural areas, temporary erosion control devices will be maintained until the footprint is re-vegetated successfully. Following successful re-vegetation of construction areas, temporary erosion control devices will be removed.*

**Requests:**

- a. Please provide an assessment that recognizes and takes into consideration the potential for additional losses to cash crop operations as a result of soil compaction and erosion.
- b. Please provide an examination of historical yield data and average production data in order to provide a baseline for analyzing and tracking future impacts to yield and production.
- c. Please amend and update Table 5.2-2 to address the long term effects associated with disturbance of the soil, compaction and erosion over multiple years on yield particularly with cash crop operations.
- d. Please explain how Imperial will compensate farmers for reduced yields resulting from disturbance of the soil, compaction and erosion until the time that lands return to the pre-construction productivity levels.

## 4.7 Water

### 4.7.1 Ground Water Supply and Wells

**Reference:** Application - Environmental Report, Section 5.2.3: Groundwater, Page 5-6 and Appendix H, Page 1-7

The Report states:

*Rural agricultural areas are often supplied by domestic ground water supply wells that may be affected by construction activities.*

*Of the 87 well in the LSA, eight (8) water supply wells are completed to a depth of less than 20m and have a depth to water of less than 4mBGS...*

**Requests:**

- a. Please describe measures that will be taken to identify on-farm water sources that could be affected and measures that will be taken to avoid disruption of those services to households and farms.
- b. It is not clear where data from Appendix H was obtained as there does not appear to be a reference. Please provide verification as to source of well water information and that there was cross reference to water well information from <https://www.ontario.ca/environment-and-energy/map-well-records>.
- c. Please provide a plan for providing water to such households and farms in the event of an interruption. Special consideration needs to be given to any livestock operations in the Project area or other forms of agriculture that require irrigation.
- d. Please confirm that Appendix H contains complete information with respect to all wells within the Project corridor, and provides references indicating the sources of the data.

### 4.7.2 Water Monitoring

**Reference:** Application Environmental Report, Section 5.2.3: Groundwater, Page 5-6 and Appendix H, Page 1-7

*The Report states "...Imperial is proposing to monitor depth to water and water quality pre-construction and post-construction, pending landowner permission and accessibility of the wells."*

**Requests:**

- a. Please include appropriate maps showing location of all wells within Halton Region that are within the Project corridor. Best efforts should be made to correlate MOECP's Water Well Records to existing rural lots and buildings in Halton Region.
- b. Please confirm that Halton will be provided with a well survey in advance of construction of each segment of the pipeline in Halton Region in order to establish status, conditions, and current use of existing wells and to determine water level variations (preferably utilizing data loggers) at each active and accessible well. The monitoring of active residential wells must continue during and post-construction. A licensed well contractor must be retained for the purpose of accessing private wells. Where no access to residential wells is available, suitable monitoring wells should be established to monitor a zone-of-influence adjacent to any planned dewatering works in rural areas serviced by residential wells. Where feasible and warranted, adjustments/repairs to active residential water supply wells should be undertaken by a licensed well contractor to prevent long-term negative effects caused by the Project (i.e. if such effects are a possibility based on local conditions' assessment).

**4.7.3 Mitigation**

**Reference:**    **Application - Environmental Report, Section 5.2.3: Groundwater, Page 5-7 (Table 5.2-3: Potential Effect, Key Mitigation Measures, and Net Effects on Groundwater)**

**Request:**

- a. Please incorporate key mitigation measures for groundwater-related matters into Environmental Protection, Management and Contingency Plans since key mitigation measures for potential effects on groundwater quality and quantity (per Table 5.2-3) are not mentioned in Section 7- Environmental Protection, Management, and Contingency Plans.

#### 4.8 Soil Compaction

**Reference:** Application - Environmental Report, Section 5.3.1: Vegetation and Wetlands, Page 5-10

The Report states:

*Activities such as the movement and storage of large equipment and stockpiling of material may also result in compaction of soils, which may impair vegetation re-growth. The extent of soil compaction will be assessed as a component of restoration works, with remediation measures, such as soil discing, to occur as needed.*

**Requests:**

- a. Please provide how Imperial will analyze and address the potential long-term negative effects of soil discing as a remediation measure, as it can disturb the soil ecosystem and affect the microbial activity and productivity of the soil for multiple years.
- b. Please provide a mitigation plan and explain how Imperial will compensate farmers for reduced yields resulting from soil discing until the time that lands return to the pre-construction productivity levels.

#### 4.9 Agricultural Productivity and Compensation

**Reference:** Application - Environmental Report, Section 5.3.1: Vegetation and Wetlands, Page 5-12

The Report states:

*Generally, agricultural crops will be restored within one growing season of construction and the restoration of other anthropogenic vegetation (particularly landscaped areas and cultural vegetation communities) or natural vegetable and wetlands will occur within three years of construction, which is expected to effectively reverse the net effects of the Project on vegetation and wetlands.*

**Requests:**

- a. Please explain how actual crop yields/productivity of the restored areas will be monitored over the long term, Agricultural crops may be restored within one growing season but it can take 4 to 7 years to obtain the level of productivity from

the fields that was occurring in advance of the Project due to the disruption of the soil ecosystem.

- b. Please explain how Imperial will address and compensate farmers for reduced yields resulting from disruption of soil until the time that lands return to the pre-construction productivity levels.

#### **4.10 Reclamation Plan**

**Reference:** Application - Environmental Report, Section 5.3.1: Vegetation and Wetlands, Page 5-11 (Table 5.3-1: Potential Effect, Key Mitigation Measures, and Net Effects on Vegetation and Wetlands)

**Request:**

- a. Please confirm that the Reclamation Plan to address direct removal of vegetation required to support pipe installation will be prepared to the satisfaction of Halton and other relevant municipalities and conservation authorities.

#### **4.11 Mitigation Measures for Vegetation and Wetlands**

**Reference:** Application - Environmental Report, Section 5.3.1: Vegetation and Wetlands, Page 5-11 (Table 5.3-1: Potential Effect, Key Mitigation Measures, and Net Effects on Vegetation and Wetlands) and Page 5-12

The Report states:

*Trenchless methods are proposed for all provincially significant wetland communities. [Table 5.3.1]*

...

*Many areas of sensitive vegetation and wetlands in the Project footprint will be avoided by using trenchless construction. The areas of the Project footprint cleared of vegetation will be restored to best match existing conditions. [Page 5-12]*

**Request:**

- a. Please confirm that mitigation measures described will be applied to all wetlands and sensitive vegetation communities and not just provincially significant wetlands. In the document as written there is some here is some inconsistency



between mitigation measures described in Table 5.3.1 and the summary contained in text in the subsequent paragraph (on p. 5-12). In Table 5.3.1, it is noted that trenchless construction methods are proposed for all provincially significant wetland communities (with no mention of other wetlands or vegetation communities). In the subsequent paragraph it is noted that many areas of sensitive vegetation and wetlands in the Project footprint will be avoided by using trenchless construction.

#### **4.12 Wildlife and Wildlife Habitat Restoration**

**Reference:** Application - Environmental Report, Section 5.3.2: Wildlife and Wildlife Habitat, Page 5-15 (Table 5.3-2: Potential Effect, Key Mitigation Measures, and Net Effects on Wildlife and Wildlife Habitat)

Restoration and/or compensation of wildlife habitat is proposed to be completed post-construction as a key mitigation measure to address potential effects on wildlife and wildlife habitat required to support pipe installation. Further, it is indicated that this mitigation measure will be planned in consultation with conservation authorities and MNRF.

**Request:**

- a. Please confirm that Halton and other relevant municipalities will be consulted in relation to this matter.

#### **4.13 Net Impacts on Agricultural Productivity**

**Reference:** Application - Environmental Report, Section 5.4.1: Agriculture, Page 5-26

The Report states:

*The net effects of the Project on access to and use of land will be limited to the construction footprint and only during construction. Generally, agricultural crops will be restored within one growing season. Compensation to affected landowners for decreases in farming output/revenue during this time are expected to fully mitigate this effect. Net adverse effects of the Project on existing agriculture are likely but are considered to be not significant.*

**Requests:**

- a. Please provide an Agricultural Impact Assessment Report to provide a more fulsome analysis of the impacts of the Project and mitigation measures to be put in place. Regional Guidelines on Agricultural Impact Assessments describe the elements that need to be included in the report (<https://www.halton.ca/getmedia/80018b1c-0530-49cd-944d-7c1e48152dee/LPS-rop-guidelines-aia-guidelines.aspx>)
- b. From an agricultural perspective, the impacts of the Project have long-term effects on the productivity of the soils as the soil ecosystem is altered (bacterial, fungal activities etc.) well beyond one year. Decreases in yield will directly affect farming operations for a number of years and can affect farm viability. Please confirm that a compensation agreement will be established with any farming operations in the Project area. Yield averages and historical information on individual parcels should be used to gauge any long-term changes that arise in association with the Project. This analysis can be done in consultation with The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and local chapters of the Ontario Federation of Agriculture.
- c. Restoration of crops is only one factor. Soil compaction, soil erosion, devastation of the soil ecosystem, ability to hold water (altered by the organic matter in the soil and particle size and soil type) all impact on yield which can have a significant effect and directly affect revenues for a farmer over multiple years. Please explain how these factors will be monitored, analyzed and addressed over the long term. Please explain how Imperial will address and compensate farmers for reduced yields until the time that lands return to the pre-construction productivity levels.

**4.14 The Potential Adverse Impacts of the Project on Agriculture**

**Reference:** Application - Environmental Report, Section 5.4.1: Agriculture, Page 5-25

The Report states:

*The potential adverse effects of the Project on agriculture are predicted to be:*

- *Restricted access to land and use of agricultural land; and*
- *Disturbance to farming and livestock operations.*

*Restricted access to, and use of, agricultural land and agricultural activities can result in reduced agricultural output and revenue for affected landowners. The Project footprint will cross 23.46 km of prime agricultural land, including approximately 12 km of farmed land, of which*

*wheat, soybeans, and corn are most prevalent. The footprint also crosses 13.05 km of pastures and forages that can serve as areas for grazing animals or sources of grass or hay for horses and cattle.*

There are concerns about restricted access and when this might occur. Farm machinery needs access to roads particularly during spring planting and harvesting (April to November), although there are instances where corn can still be harvested throughout the winter months. Any delays in the Project could result in larger impacts on the agricultural community as this could infringe on key times where access is needed to adjacent fields in order to seed, spray or harvest a crop. This could compromise farming revenue and should be considered.

It should also be noted that agricultural production requires large machinery to access fields in the area. Any narrowing or closures of roads needs to take into account the ability of such vehicles to access lands through existing or alternate routes.

In addition, depending on the farm set up, access to pastures for grazing animals could be compromised. Any reductions in hay yield as a result of soil disturbance (which could have an impact over a number of years) or access to pasture (that could require hay supplementation to livestock to meet their nutritional needs) has financial implications for farmers.

**Requests:**

- a. Please provide a contact that can respond to any concerns from the agricultural sector.
- b. Please explain how Imperial will accommodate access needs of large farm equipment, which may conflict with construction activities and which equipment may need to cross Imperial's work area if there is no alternative access to agricultural lands.
- c. Please provide details as to how the impact of restricted access to pastures for grazing animals will be mitigated, particularly in situations where there is no option available to move animals to other areas for grazing. How will this be addressed?
- d. Please provide details as to how the financial implications for farmers that may result from reductions in hay yield and/or reductions in access to pasture will be remedied.

#### **4.15 Monitoring and Mitigation Plan Long-Term Agricultural Impacts**

**Reference:** Application - Environmental Report, Section 5.4.1: Agriculture, Page 5-26 (Table 5.4-1: Potential Effect, Key Mitigation Measures, and Net Effects on Agriculture)

The table states that “*Imperial will prepare ROW plans and easement agreements that will help to determine compensation for decrease in farming output/revenue.*”

**Requests:**

- a. Please provide a plan for monitoring and mitigating potential long-term impacts of the Project on productivity until the time that lands return to the pre-construction productivity levels.
- b. How does Imperial intend to compensate farmers for any decreased yields until the time that lands return to the pre-construction productivity levels?

#### **4.16 Traffic Management Plan for Regional Roads**

**Reference:** Application - Environmental Report, Section 5.4.2: Residents and Businesses, Page 5-26

Changes in local traffic patterns (e.g., road or lane closures) could be expected if delivery of construction supplies or equipment is necessary, or if construction activity close to a roadway obstructs access to residential properties and businesses. Lane closures and traffic disruptions must be applied for through the Municipal Consent process.

**Request:**

- a. Please confirm that Imperial will prepare and submit to Halton, a detailed Traffic Management Plan for review and approval for the access to and from each Regional Road.

#### **4.17 Process for Construction on Regional Roads**

**Reference:** Application - Environmental Report, Section 5.4.5: Linear Infrastructure, Page 5-31

Imperial states that trenchless installation methods will be used to avoid damage to roads and railroads.

**Requests:**

- a. Has sub-surface utility investigation been completed to confirm watermain and sanitary main elevations? Please provide details within cross section/Plan & Profile drawings, in order that the adequacy of the investigations can be determined by the Region with respect to Regional Roads.
- b. In order to protect Regional linear infrastructure, please confirm that consent for the completion of works at each Regional road crossing will be sought through a Municipal Consent Application process.
- c. Please confirm that each access point to the Project off a Regional Road will be undertaken through the Entrance Permit Application process
- d. Please confirm what type/material of pipe used under roads, creeks or railways differ in diameter, wall thickness, etc. from other portions of the pipeline? Will the pipeline be installed within a casing?

**4.18 Water Management Plan**

**Reference:**    **Application - Environmental Report, Section 7: Environmental Protection Management and Contingency Plans, Page 7-2**

The Report states:

*Water Management Plan*

*The Water Management Plan will support implementation of conservation measures to reduce water use during construction and identify water taking requirements and water discharge methods and locations. The Plan will outline mitigation measures for working around water wells, shallow groundwater and unconfirmed aquifers, and protection measures in the area of dewatering discharge locations. The Plan will also address the management of water for drilling and hydrostatic testing.*

Although the new pipeline is planned within the corridor occupied by the existing pipeline, subsurface conditions at a local scale are not known. Influence of new excavation, dewatering, and construction can only be determined once local scale investigation is undertaken and then refined after construction has commenced. Certain features along the construction route in Halton Region may act as substantial subsurface water reservoirs (e.g. buried channels/meanders, etc.). Interception of such features during construction works may prompt a need for significant dewatering

requirements, which could result in greater than anticipated impacts to local groundwater resources.

**Requests:**

- a. Please confirm that the water components in the future Environmental Protection Plan (EPP) will go beyond the water management plan outlined in Section 7 of the Report and incorporate, among other things, a comprehensive groundwater protection, management and mitigation plan to ensure that proper assessment takes place and corrective actions are implemented (as required) for each segment along the construction route in Halton Region. Please confirm that the monitoring, contingency, and mitigation actions will be clearly defined in the future EEP.
- b. Please confirm that the groundwater protection, management and mitigation plan will include the following:
  - a flow chart depicting step-by-step course of action to assess, protect and/or manage groundwater quality and quantity along the pipeline construction route;
  - a chart outlining roles/responsibilities/decision-making process and contact information for any enquiries;
  - a system for notifications to agencies on any complaints from public; and
  - details as to how such complaints will be addressed (including timelines) and protocol for reporting on corrective actions undertaken.
- c. Please confirm that the EEP will be inclusive of on-going communication commitments with applicable agencies, so that as new information is collected along the Pipeline corridor, the groundwater protection, management, and mitigation plan is refined in collaboration with applicable agencies.
- d. Please confirm that, as part of the EPP, Imperial will develop a strategy to secure the new construction zone from any potential cross-contamination related to the existing pipeline, which is to be deactivated. This should be inclusive of any potential soil and groundwater remediation activities that might be required along the new pipeline route in relation to such contamination
- e. Please confirm that adequate assessment of subsurface conditions along the planned route in Halton Region will be carried out ahead of any detailed construction design. Imperial Oil should engage reputable experts, including members of Professional Geoscientists of Ontario (PGO) or Professional Engineers Ontario (PEO) qualified to practice professional geoscience (including hydrogeology) in Ontario, to carry out and/or oversee any hydrogeologic investigations along the planned pipeline construction route in Halton Region. The assessment of subsurface conditions, including drilling, soil sampling, monitoring well installations, water quality and quantity monitoring programs, assessment and delineation of high permeability zones and local groundwater

- flow, dewatering and water disposal estimation, water budget analysis, etc. and any required reporting to agencies, should be carried under direction and oversight from qualified hydrogeologic consultants.
- f. Please confirm that any management and mitigation plans will be developed ahead of the planned construction activities and refined as appropriate during construction works.
  - g. Please confirm that any construction-related groundwater monitoring and testing along the excavation route will be carried out utilizing properly installed monitoring wells (i.e. in accordance with R.R.O. 1990, Reg. 903: Wells) and appropriate monitoring equipment in order to provide for reliable information and data collection. Maps depicting local pre-construction groundwater flow and potential changes anticipated during dewatering works would be an important part of evaluation. Groundwater monitoring, testing, and data analysis and interpretations should be carried out under the oversight of a qualified hydrogeologist, and data should be recorded on an on-going basis and summarized in an extraction-related hydrogeological summary reports (i.e. for reference and review as required). Such reports and records would provide for an important long-term record with respect to this project in Halton Region.

#### **4.19 Project Interactions with Halton Biosolids Processing Plant Upgrade**

**Reference:** Application - Environmental Report, Section 6.3: Project Interactions with Current and Foreseeable Projects, Page 6-4

The Report states:

*The Region of Halton is planning to upgrade the Halton Biosolids Processing Plant near Regional Road 25 and the upgrades may interact with the proposed construction timing. The Project will be installed by boring under Regional Road 25 and the access road to the Plant, which will avoid any traffic disruptions. No other potential cumulative effects related to the Plant upgrades are anticipated.*

Heavy vehicular traffic utilises the existing entrance to the Biosolids Plant.

**Request:**

- a. Does Imperial intend to use this entrance as an access point to the proposed bore locations?

#### 4.20 Environmentally Appropriate Area Compensation

**Reference:** Application - Environmental Report, Section 7: Environmental Protection, Management and Contingency Plans, Reclamation Plan, Page 7-1, 7-2

The Report states:

*Environmental Protection Plan*

*The purpose of the EPP is to outline the management of the environmental programs during construction in a systematic and documented manner. It includes the applicable requirements and compliance procedures, organizational structure, specific roles and responsibilities, procedures for training personnel, inspection and reporting, and other processes and procedures to maintain environmental compliance. The EPP provides the standards and processes to manage and monitor potential environmental effects. The EPP guides environmental management during construction of the Project and is progressively developed as the Project moves through the OEB approval process, permitting and construction phases. The first stage of the EPP begins with preparation of Environmental Management Plans (EMPs) as part of the EA/permitting process that are commitment-based and broad in their level of detail. As the Project's planning progresses, so does the level of detail of the EMPs, to include permit approval terms and conditions, and other applicable regulatory requirements. The EPP and EMPs form the basis for what will be implemented during construction.*

...

*Reclamation Plan*

*The Reclamation Plan will address the planning, management, and monitoring activities related to the restoration and rehabilitation of the Project's ROW during and after construction. The goal of the Reclamation Plan is to return affected areas to their pre-construction function where feasible, and within 1-3 years following construction. This may include:*

- *Landscaping farmland and private properties in residential areas with the goal to return the landscape to equivalent pre-construction conditions. Where this cannot be completed, compensation for the landowner will be negotiated.*
- *Certain planting and building restrictions apply to residential properties containing a permanent ROW; however, in consultation with residents, restoration will be designed to accommodate the easement and owner's use.*
- *Disturbance to sensitive habitats and ecosystems (e.g., watercourses, riparian areas, wetlands, woodlands), will be avoided where possible using trenchless construction methods. Where an area cannot be*



*avoided, mitigation measures will be implemented to avoid or minimize effects on sensitive ecosystems. Conservation authorities, municipalities, and the MNRF will be consulted for vegetation removal compensation (e.g., native seed mixes, tree planting). Refer to Appendix A for a Watercourse Restoration typical drawing.*

**Requests:**

- a. Neither the Environmental Protection Plan nor the Reclamation Plan, whichever is more appropriate, provide for environmentally appropriate area compensation. Please address how compensation in the form of vegetation replacement will occur within the Regional Natural Heritage System Buffers, Linkages, and Enhancement area, as applicable, as close as possible to the area of removal and preferably on public lands.
- b. Please identify the replacement ratios (which should be commensurate with the replicability of the feature being removed (i.e. features that are more difficult to replace warrant a higher replacement rate) which are at a minimum, a replacement ratio of 2:1 replacement area to area removed should be used. Please confirm that replacement of individual trees will occur in according to relevant municipal and conservation authority standards.

**4.21 Reclamation Plan – Tree Removal**

**Reference:** Application - Environmental Report, Section 7: Environmental Protection, Management and Contingency Plans, Reclamation Plan, Page 7-2

See “Reclamation Plan” portion of quoted text in 4.20 above.

**Request:**

- a. Please confirm that a Reclamation Plan will be prepared to the satisfaction of Halton. All tree removal associated with the pipeline construction must be authorized in accordance with Halton’s Tree By-law (By-law# 121-05). Halton will require that any trees or woodlands removed to accommodate the pipeline easement, staff recommend that the Reclamation Plan be developed to show replanting corresponding with appropriate ratios, to enhance ecological functions of the Regional Natural Heritage System, as close to the area of removal as possible and either prior to or immediately after removal. In instances where landowners have no interest in replanting trees on their property, it is recommended that owners of adjacent lands that contain suitable RNHS Buffer, Linkage, and/or Enhancement areas be approached to determine their willingness to allow for planting in these areas. If they too are uninterested in planting trees on their properties in the areas identified, it may be appropriate to enter a replanting agreement with Conservation Halton.

#### **4.22 Reclamation Plan - Restoration**

**Reference:** Application - Environmental Report, Section 7: Environmental Protection, Management and Contingency Plans, Reclamation Plan, Page 7-2

**Request:**

- a. This section of the Environmental Report states that the Reclamation Plan will address the planning, management, and monitoring activities related to the restoration and rehabilitation of the Project's right-of-way during and after construction. The stated goal of the Reclamation Plan is to return affected areas to their pre-construction function where feasible, and within 1-3 years following construction. There is no reference to any contingency plans for disruption to Halton-owned infrastructure. Please confirm that all Halton's infrastructure (water, sanitary, storm) and Regional roads (including shoulders, ditch grading and surface restoration within the Regional right-of-way) will be addressed in the Reclamation Plan.

#### **4.23 Source Protection Plan - Drinking Water**

**Reference:** Application - Environmental Report, Appendix B: Consultation Key Comment and Response Table, Page 8

The Source Protection Plan for the Halton and Hamilton Regions contains Policy No. L-2-S, which states:

*To reduce the risks to drinking water sources from the construction of pipelines conveying oil across open water bodies,*

*a. the National Energy Board and the Ontario Energy Board in their consideration of any oil pipeline application where this activity would be a significant drinking water threat are requested to ensure that the applicant has complied with or included appropriate design standards, monitoring, and maintenance practices that when implemented will prevent a pipeline from becoming a significant drinking water threat.*

*b. the Source Protection Department of the Halton Region and Hamilton Conservation Authorities shall consult with the National Energy Board and the Ontario Energy Board to determine if pipeline design standards and the requirements for monitoring and maintenance practices in*

*vulnerable areas consider drinking water source protection, such as the use of isolation valves at either side of creek crossings.*

The Consultation Key Comment and Response Table shows a request from the Ministry of Environment, Conservation and Parks to consider source protection areas that the Project is crossing. Imperial's response states:

*Responded to comment during meeting with MECP that these will be considered with ongoing project planning and design and outlined within the permit application. Refer to section 5.2.4 of the Environmental Report.*

Review of Section 5.2.4 of the Environmental Report does not indicate how Source Protection Areas and related policies will be addressed by Imperial, but it does indicate that "[t]he potential effects of accidental hydrocarbon spills are assessed in Section 7.3" and "[p]otential effects during operation of the pipeline are changes in surface water quality, related to the risk of a hydrocarbon spill, and are discussed in Section 5.4.9." However, the Environmental Report does not appear to contain a Section 5.4.9 or a Section 7.3.

The Environmental Report does not identify the applicable Source Protection Plan policies nor does it indicate how those policies have been addressed to ensure that the proposed pipeline does not become a significant threat to Halton's drinking water sources.

**Request:**

- a. Please describe how Imperial's proposal complies with appropriate design standards, monitoring, and maintenance practices (ex. use of isolation valves at either side of creek crossings) as required by Policy No. L-2-S of the Source Protection Plan for the Halton and Hamilton Regions, to prevent the proposed pipeline from becoming a significant threat to Halton's drinking water sources.

**4.24 Intake Protection Zone and Event Based Area Locations**

**Reference: Application - Environmental Report, Appendix D: Environmental Features Map, Page 1-7**

The Environmental Features Map presents "Intake Protection Zone and Event Based Area" locations within the Credit Valley and Toronto and Region Source Protection Areas (pages 4 -7). The Environmental Features Map does not show the "Intake Protection Zone and Event Based Area" locations within the Halton Region Source Protection Area. These

locations are included in the province's Source Protection Information Atlas and on Figure 8 of the Source Protection Plan for Halton and Hamilton Regions, and should be considered in the implementation of the applicable policies in the Source Protection Plan for the Halton and Hamilton Regions to ensure that the proposed pipeline does not become a significant threat to Halton's drinking water sources.

**Request:**

- a. Please add the "Intake Protection Zone and Event Based Area" locations within the Halton Region Source Protection Area to the Environmental Features Map.

**4.25 Identify the Regional Natural Heritage System**

**Reference:** Application - Environmental Report, Appendix D: Environmental Features Map, Page 1-4

**Request:**

- a. Please confirm that Imperial will accurately identify components of the Regional Natural Heritage System (RNHS) on the Environmental Features Maps. Section 115.3 and Map 1G of the Halton Region Official Plan describe and map the components of the RNHS land use designation. The components of the RNHS as shown on Map 1G should be identified on the Environmental Features Maps which apply to Halton.