

Imperial's Sarnia Products Pipeline

Waterdown to Finch Project
Community Information Session



Imperial's Waterdown to Finch Project

Important infrastructure to the Greater Toronto and Hamilton Area (GTHA).

Imperial's Sarnia Products Pipeline is important to people, businesses and community organizations in the GTHA. It carries a variety of fuels, including:

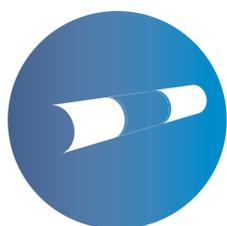


Jet fuel used at Toronto Pearson International Airport

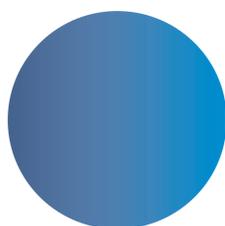


Gasoline and diesel fuel that keeps people, goods and services moving throughout the region

Safety and reliability: pipeline replacement from Waterdown to Finch



Involves the replacement of the existing 12-inch pipeline with a new 12-inch pipeline



Supports continued safe and reliable pipeline operations



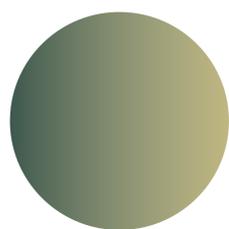
Proactive engagement with landowners, communities and Indigenous groups



Collaboration with governments and regulators to ensure the highest standards of environmental safety

Focused on safety

Imperial's safety performance is among the best in the Canadian energy industry. We attribute our record of safe and reliable operations to our preventative maintenance and proactive pipeline inspection programs.



PIPELINE PROTECTION MEASURES

Cathodic protection along protected steel pipe to safeguard against external corrosion

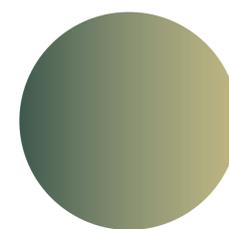
Automated valves shut off in case of an unexpected pressure drop, and are controlled remotely by an operations centre



FOCUSED ON SAFETY

Monitoring 24 hours a day, 365 days a year. This includes weekly aerial patrols along the pipeline's path

Annual emergency response exercises, and two highly trained and resourced emergency response teams based in southern Ontario



INNOVATIVE TECHNOLOGIES AND MAINTENANCE

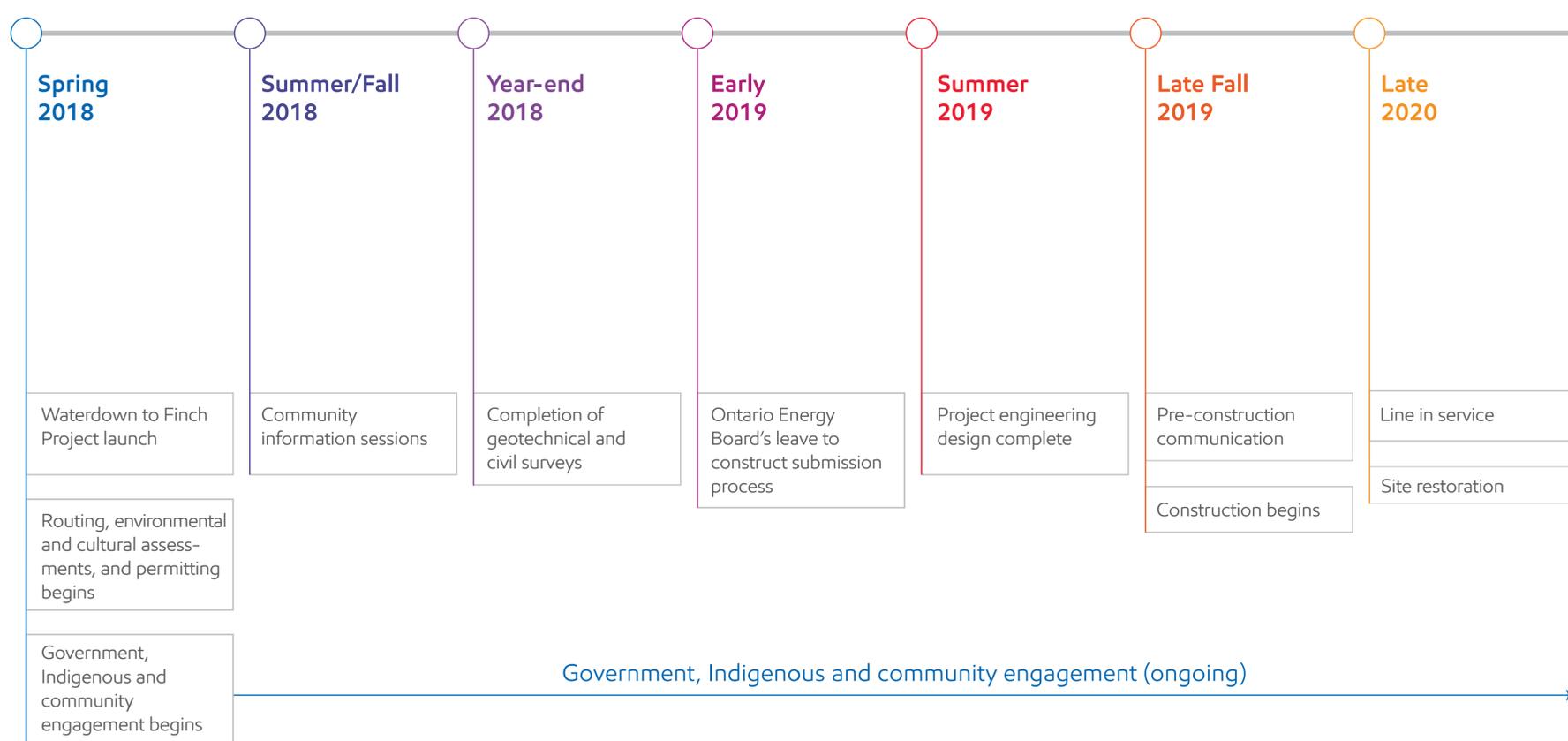
Specialized tools such as SmartBalls and Smart Pigs confirm both internal and external characteristics of the pipeline to identify repairs

Ongoing maintenance work or integrity digs help to facilitate continued safe pipeline operations



Project timeline

Environmental and cultural assessments commenced in the spring of 2018. Subject to provincial regulatory reviews and receiving all permits, Imperial expects to start construction in 2019.



*Timeline is subject to regulatory and permitting approvals.

Land, regulatory and permitting approvals

Imperial will require regulatory approvals, permits or project information sharing from the following entities:

○ Federal

- Environment and Climate Change Canada
- Fisheries and Oceans Canada
- Transport Canada

○ Provincial

- Infrastructure Ontario
- Niagara Escarpment Commission
- Ontario Energy Board, and the Ontario Pipeline Coordinating Committee
- Ontario Ministry of Agriculture, Food and Rural Affairs
- Ontario Ministry of the Environment, Conservation and Parks
- Ontario Ministry of Indigenous Affairs
- Ontario Ministry of Natural Resources and Forestry
- Ontario Ministry of Tourism, Culture and Sport
- Ontario Ministry of Transportation

○ Conservation Authorities

- Conservation Halton
- Credit Valley Conservation Authority
- Hamilton Conservation Authority
- Toronto and Region Conservation Authority

○ Municipalities/Regions

- City of Burlington
- City of Hamilton
- City of Mississauga
- City of Toronto
- Region of Halton
- Region of Peel
- Town of Milton
- Town of Oakville

○ Other

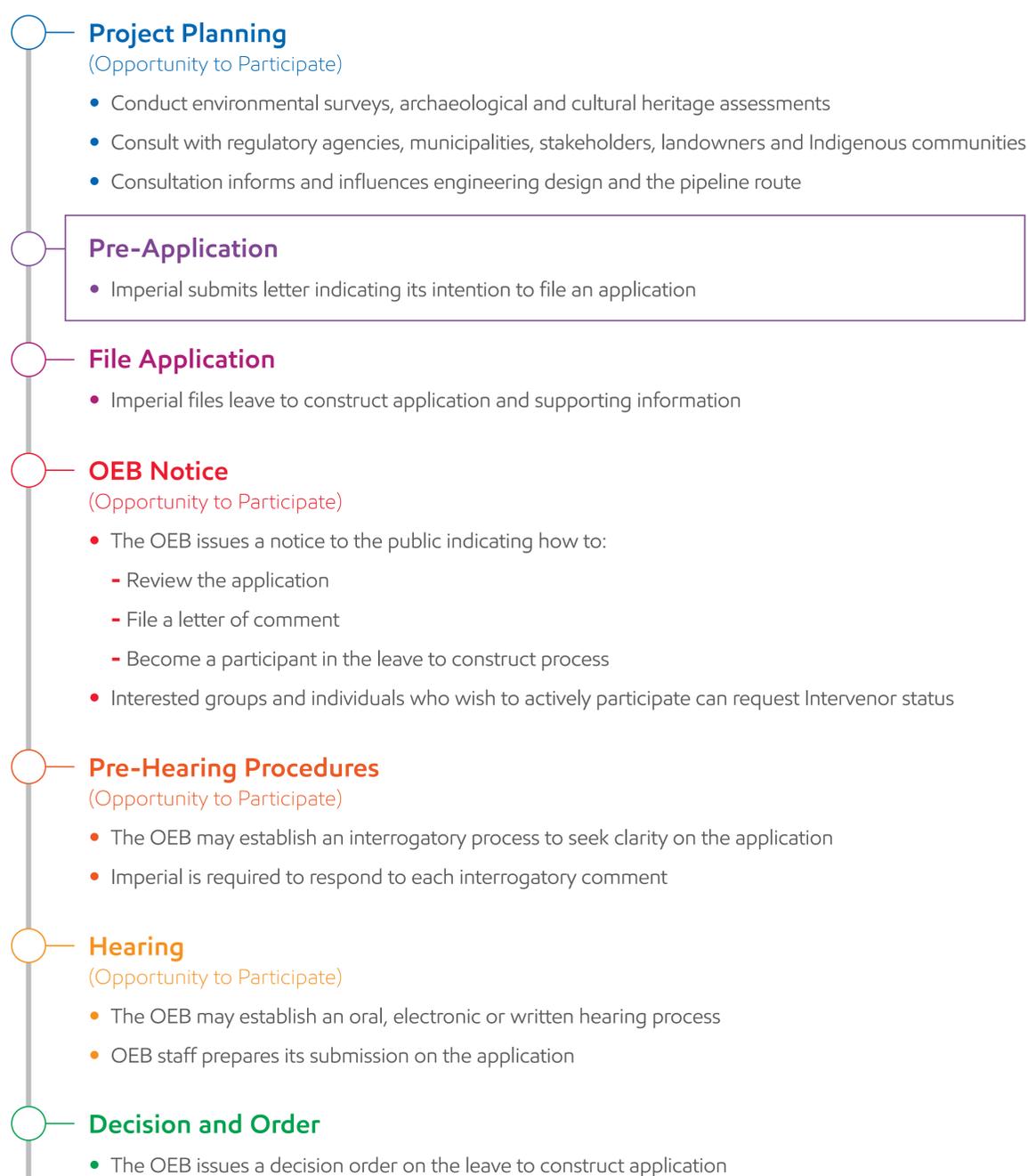
- Technical Standards and Safety Authority



Leave to construct process

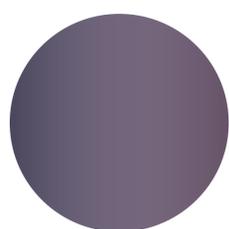
Imperial will submit a leave to construct application to the province's energy regulator, the Ontario Energy Board (OEB). This process includes a thorough assessment of the Project's environmental attributes and engagement with landowners, communities and Indigenous groups.

Below is an overview of the process:



Imperial's contributions to Ontario

As an integrated energy company, we explore for, produce, refine and market products essential to society. Some highlights of Imperial's economic footprint in Ontario include:



Founded in Ontario



More than 130 years of providing Ontarians with reliable and affordable products



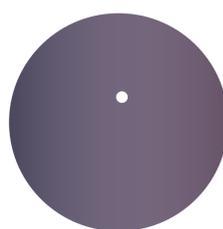
1,200 employees and 3,500 contractors employed daily in Ontario



\$750 million in capital investments at two refineries in Sarnia and Nanticoke for environmental improvements, energy conservation programs, clean fuel facilities and infrastructure improvements



Supporting education and training programs that develop our skilled workforce of the future



\$300 million in research and development invested in Ontario over the past decade

Imperial's ongoing contributions to Ontario:



Source: Business Council of Canada 2016 Total Tax Contribution Survey.

Environmental planning: putting assessments into action

Imperial works to ensure the highest standards of environmental safety are observed every day. Imperial has conducted a comprehensive planning process to evaluate and assess potential environmental impacts and proposed mitigation measures. These include:



Fish habitat assessments

Outcome: Informed whether or not in-water work during construction will need to avoid the timing of sensitive fish life stages



Vegetation and wetland surveys

Outcome: Informed the presence of rare plants and wetlands which may need to be either avoided or environmental effects mitigated and/or compensated



Groundwater and surface water studies

Outcome: Identified existing conditions and water uses such as water wells and informed water management planning to avoid/reduce environmental effects on water quality and quantity



Informing Alternatives

Outcome: Regulatory, stakeholder and landowner engagement has influenced the current pipeline alignment and construction methods



The findings and mitigation actions will be included in Imperial's leave to construct application and posted online at imperialoil.ca/waterdowntofinch. You can also sign up for updates at questions@imperialon.ca

Archaeology and cultural heritage

Imperial is conducting archaeological and cultural heritage assessments along the pipeline route

We are also using historical maps and other tools to identify historical settlements like farmsteads and historic buildings. Imperial will minimize potential impacts to archaeological and cultural heritage resources by:

- Assessing the route for known and potential archaeological and cultural resources
- Deploying trenchless construction methods at river crossings with high archaeological potential to avoid impacts to known archaeological sites
- Engaging licensed archaeologists in the event previously unknown archaeological artifacts are observed during construction

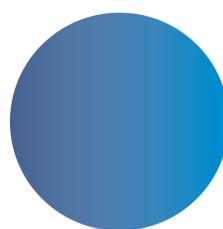


What we've heard

Incorporating regulatory, stakeholder, community and landowner feedback



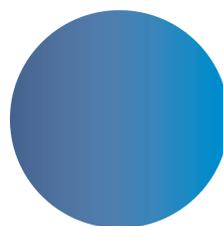
400+
Engagement records



20+
In-person community information sessions



50+
Formal agency and permitting body meetings held



1,500+
Landowners notifications

Protecting natural heritage

Conduct vegetation and wetlands, Species at Risk, and fish habitat field surveys.

Schedule construction outside of sensitive Species at Risk timing windows, where feasible.

Identifying route alternatives

Avoid electricity transmission infrastructure by re-routing new pipeline within the existing Hydro One utility right-of-way and using alternate construction methods such as boring and directional drilling techniques to avoid sensitive surface areas.

Supporting emergency response preparedness

Work collaboratively with stakeholders to review emergency plan

Imperial collaborated with local emergency services and others in recent Emergency Response Exercise.

Minimizing impacts to local transportation networks

Implement traffic control plans and mitigation measures to minimize traffic impacts

Impacts to paved roadways will be avoided by using trenchless construction methods where possible

Preserving known archaeological and cultural heritage resources

Avoid known archaeological sites and engage Indigenous community members on archaeological assessment planning and review.

Conducting agricultural assessments

Complete an agricultural impact assessment and avoid/mitigate impacts to agricultural landowners.

Engaging indigenous monitors

Work collaboratively with Indigenous field monitors on archaeological assessments and environmental field surveys.

Providing detailed maps and online resources

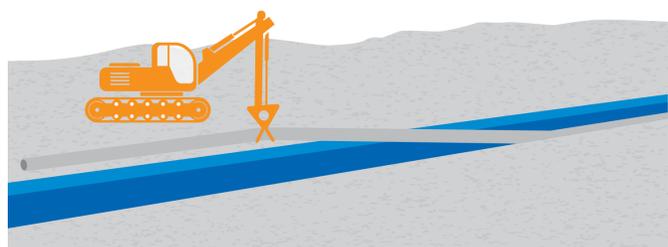
Facilitate a greater exchange of information about the Project

Imperial created an "online information session" with ongoing Project updates and detailed maps at imperialoil.ca/waterdowntofinch.

Produced interactive videos to address key public topics and questions/feedback received at July information sessions.

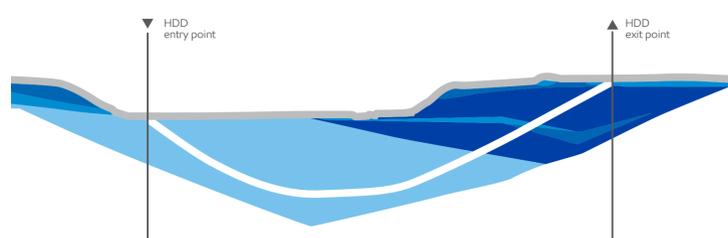
Construction methods

Based on engineering, archaeological and environmental surveys, Imperial will perform one of two construction techniques:



Open cut construction

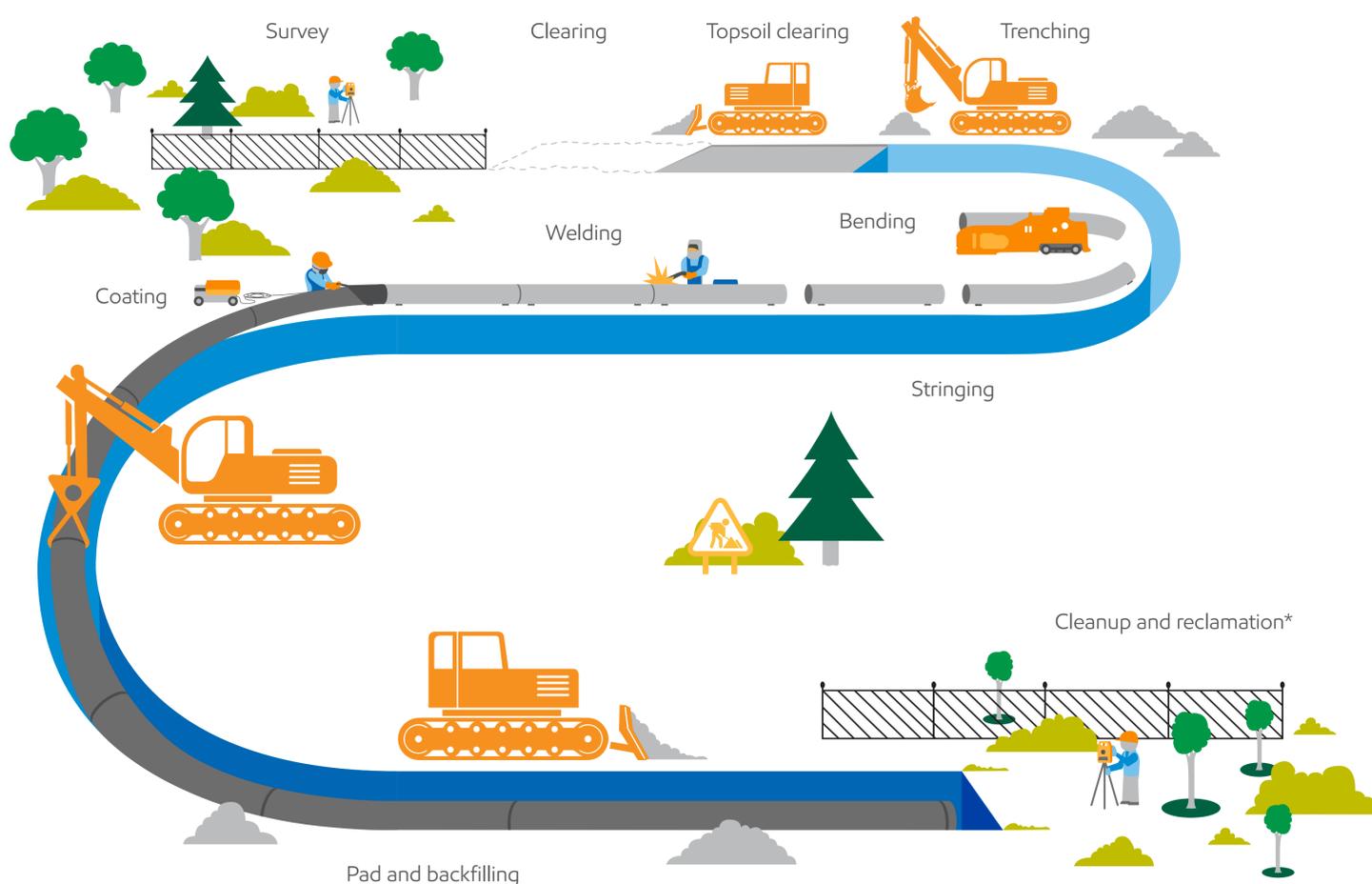
- The fastest method of pipeline installation
- Lay and bend the pipe to match contours of the land
- Weld, test and inspect the pipe
- Lower pipe into the trench and cover it for protection



Trenchless-horizontal directional drill (HDD)

- Pipeline installation using a drilling rig at the surface level—best used in sensitive areas and crossings or dense residential/commercial areas
- Drill a pilot hole along a designed directional path
- Enlarge the pilot hole to a diameter suitable for installation of the pipeline
- Pull the pipeline back into the enlarged hole

Construction process



*Cleanup and reclamation will include: soil replacement, seeding and tree planting.

Minimizing construction impacts

As the Project proceeds, Imperial will make every effort to limit our construction footprint in local communities through the following measures:



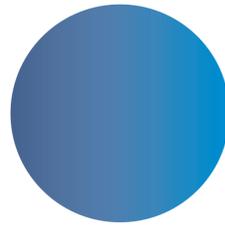
Hours of work involving continuous noise and heavy vibration will be limited to specific times



Construction teams will use pre-existing rights-of-way, such as utility corridors, where possible, for access



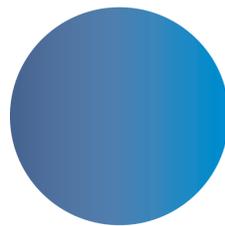
An onsite representative will be appointed to address questions and concerns about the Project during construction. Contact information will be provided to residents within the vicinity of the Project prior to the start of construction



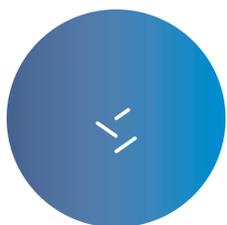
Whenever possible, multi-passenger vehicles will be used to transport workers along the construction corridor. This will reduce traffic along the right-of-way and access roads as well as reduce noise and air emissions



Impacts to paved roadways will be avoided by using trenchless construction methods



Ongoing engagement with residents, businesses, and landowners about construction activities and timing, and coordinated access to properties



Imperial will continue to work closely with regulatory agencies, and comply with all environmental requirements

Safe pipeline deactivation

Imperial will safely deactivate the current pipeline, which will cause the least disturbance to the local environment and minimize our construction footprint.

Imperial deactivates pipeline segments in accordance with industry best practices (Canadian Standards Association's Oil and Gas Pipeline Systems Code) and provincial regulations (*Technical Standards and Safety Act*).

Pipeline deactivation process



1. Remove the product from the pipeline using specialty cleaning instruments and products



2. Disconnect the existing pipeline



3. Fill the disconnected pipeline with nitrogen (like what we put in our car tires) to maintain pipeline pressure



4. Visual inspections to continue monitoring the deactivated pipeline

Imperial is responsible for paying for the maintenance and monitoring of the deactivated pipeline.

Indigenous collaboration

Respect for the land, the environment, and the rights and cultures of Indigenous communities.

Imperial maintains an ongoing dialogue with Indigenous leaders, community members and their designated representatives by:

- Respecting traditional practices, decision-making processes, cultural activities and language
- Ensuring timely discussions when activities have the potential to impact the community
- Respecting the legal rights of Indigenous peoples as well as the Crown's duty to consult
- Treating all parties fairly
- Responding to comments and concerns in a timely manner

Incorporating traditional knowledge

Imperial works collaboratively with Indigenous field monitors on archaeological assessments and environmental field surveys. Through this effort we can help ensure the protection and preservation of archaeological and culturally significant areas. Imperial will continue to conduct archaeological assessments with communities and share findings.



Committed to community engagement and transparency

We appreciate the patience of our neighbours, Indigenous groups and other community members as we work to enhance the long-term safety and reliability of our existing operations.

We are committed to meaningful engagement throughout the Project with:

- Residents and Project neighbours
- Indigenous communities
- Local governments and elected officials
- Permitting authorities

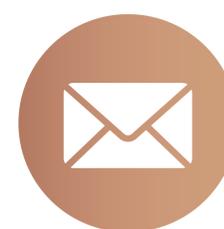
Community members have several ways to receive information and ask questions:



imperialoil.ca/waterdowntofinch



416.586.1915



questions@imperialon.ca



Community information sessions
in the summer and fall of 2018



Construction notices to
landowners and adjacent
landowners will be delivered
a minimum of two weeks
before activity begins



Ongoing information sharing
with community leaders