

August 2015

Line 10 Westover Segment Replacement Project

Ensuring continued safe and reliable operations in Ontario

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Line 10 Westover Segment Replacement Project

Agenda

1. Project Scope and Overview

- Project Need
- Line 10 Westover Segment Project Timeline

2. Delivering Energy and Economic Benefits

3. Project Details

- Commitment to the environment
- Segment decommissioning

4. Commitment to Engagement

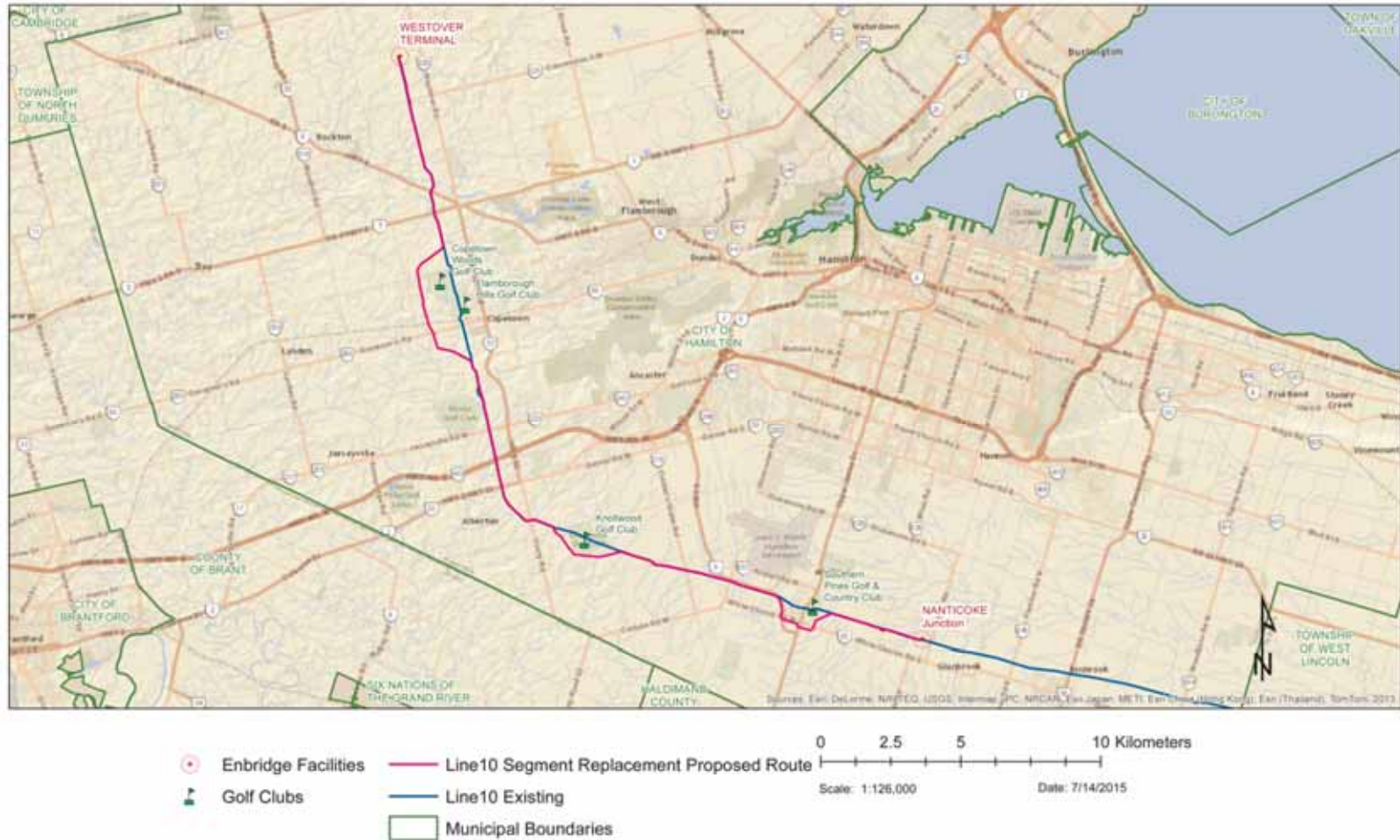
- Project contact information
- Commitment to safe operations
- Emergency Response Action Plan Update

5. Questions and Discussion

Line 10 Westover Segment Replacement Project

Proposed Line 10 Westover Segment Replacement Project

Project Map



Line 10 Westover Segment Replacement Project

Project Scope and Overview

Line 10 Westover Segment Replacement Project Summary

Project Summary

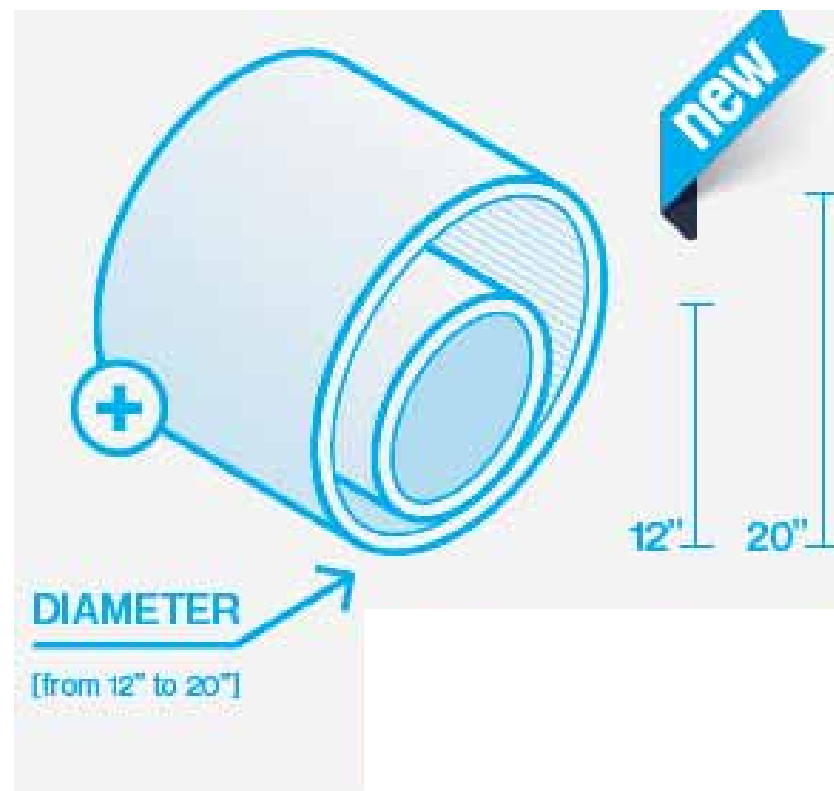
Replacement of approximately 35 km of the line from Westover Station to the Binbrook area in rural Hamilton. The project includes:

- Replacing 12" diameter pipe with 20" diameter pipe
- Rerouting in some areas

Full capacity:

74,200 bpd

- Currently transports: 60,000 bpd
- Carries light synthetics, sweet, light and high sour, medium, heavy crude



Line 10 Westover Segment Replacement Project

Project Need

Driven by our commitment to safety

- Having conducted extensive and sophisticated inspections, we have determined that the Westover segment of Line 10 has reached our conservative threshold for replacement, rather than undergo a program of further inspection and routine maintenance.
- This segment has experienced a higher concentration of integrity digs and associated impacts to landowners, as well as voluntary pressure restrictions that restrict capacity.
- The Line 10 Westover Segment Replacement Project will address pipeline maintenance requirements, improve reliability and safety of the system, and restore the pipeline to its original operating capacity; 74,200 bbd.
 - No expansion of volumes beyond approved maximum volume is planned
 - Line 10 currently transporting approx. 63,500 bbd
- Based on our current analysis of future shipper needs and maintenance requirements, replacement of other segments over the subsequent several years is expected to be the optimal pipeline management approach. Timing for such work will be determined through ongoing pipeline integrity assessments.

Line 10 Westover Segment Replacement Project

Project Timeline (tentative)

Line 10 Westover Segment Project Timeline

June 2015	Initial government, Aboriginal, landowner and public outreach
June to December 2015	Pre-application consultation; open houses, roundtable discussions, and one-on-one meetings
July 2015 to August 2016	Civil and environmental surveying
December 2015	File project application with National Energy Board
December 2015 to 2018	Ongoing consultation
September 2017	Pipeline construction (contingent on NEB approval)
First quarter 2018	Pipeline goes into service
September 2018	Right-of-way restoration complete

Line 10 Westover Segment Replacement Program

Economic Benefits to Region

Delivering Energy and Economic Benefits

- Line 10 is part of Enbridge's cross-continental network crude oil transportation network spanning 25,000 kilometers.
 - Connects people to the energy they need – safely and reliably.
- Enbridge's projects and operations in Ontario represent a diverse cross-section of the energy industry—pipelines, natural gas distribution services, and green energy.
- In 2014, Enbridge's economic impact in Ontario can be expressed in a number of significant ways::
 - Invested more than \$1.5 billion in procurement spending;
 - Spent \$200 million in Ontario-based salaries;
 - Employed 2,674 people; and
 - Created about \$60 million in tax revenue.
- The current value of exports shipped through Enbridge's Line 10 amounts to more than \$1 billion per year.

Line 10 Westover Segment Replacement Project

Local Benefits

Delivering Energy and Economic Benefits

- In 2014, Enbridge paid an estimated \$1.7 million in property taxes to the seven southern Ontario municipalities along the Line 10 corridor.
 - \$1,230,265.00 in property taxes paid to City of Hamilton in 2014
 - The Line 10 Westover Segment Replacement Project is expected to create about 150 construction jobs over 24 month period.
 - The project will also generate significant local economic spinoffs.
 - As part of the NEB submission, Enbridge will commission an independent economic benefits analysis during summer of 2015.
- Enbridge is working closely with local communities, First Nations and Métis communities near the Line 10 Westover Segment Replacement Project to identify opportunities for capacity building and economic benefits.

Line 10 Westover Segment Replacement Project

Commitment to the Environment

Following Environmental Best Practices

- The safety of people, and protection of the environment, is our top priority.
- Incorporate environmental evaluations into construction planning to minimize environmental and stakeholder impact, extra consideration of sensitive areas.
- Regulatory oversight is extensive.
 - We work closely with all appropriate environmental agencies to provide the environmental protection that communities expect and deserve.
 - MOE&CC, MNR, Hamilton CA
- Enbridge will conduct an environmental and socio-economic assessment on the Line 10 Westover Segment Replacement Project prior to submitting an application to the NEB that will include:
 - A description of the environmental and socio-economic setting of the project area;
 - An assessment of the environmental effects of the project; and
 - An assessment of the cumulative effects and information on inspection, monitoring and follow-up.

Line 10 Westover Segment Replacement Project

Pipeline Construction Process

Committed to working with you and constructing safely

- Enbridge will secure a primary contractor to execute pipeline construction.
- An evaluation of several factors including stakeholder feedback helps establish a construction schedule.
- Enbridge and its contractor(s) will adhere to the municipality's processes in regard to crossing agreements, permitting, scheduling of work, road limitations, etc.
- Prior to construction, Enbridge will engage with impacted communities to discuss construction activities.
- During construction, Enbridge and the contractor will maintain communication with municipal departments as well as provide notices to the general public.
- Community and crew safety is paramount during construction . Enbridge's *Construction Safety Awareness campaign*, will inform citizens of our presence and activity through various communication mediums (print, social media, events, signage, etc.)
- All Project concerns brought to our attention will be addressed in a timely manner.

Line 10 Westover Segment Replacement Project

Pipeline Construction

Steps and equipment involved

- Pipeline construction consists of the following phases:
 1. Accurate staking of the pipeline right-of-way
 2. Removing topsoil and storing on the right-of-way for post-construction replacement
 3. “Stringing” the new pipeline segments on the ROW
 4. Bending of the pipe (to follow land contours) and welding
 5. Inspecting welds and coating of welded joints
 6. Trenching by backhoes or wheel ditchers (subsoil stored separately from topsoil) and second inspection of coating
 7. Lowering of pipeline into the trench
 8. Backfilling of trench with subsoil
 9. Testing of pipeline integrity with water pressure (Hydrostatic testing)
 10. Replacing topsoil and reclamation of the right-of-way.

Line 10 Westover Segment Replacement Project

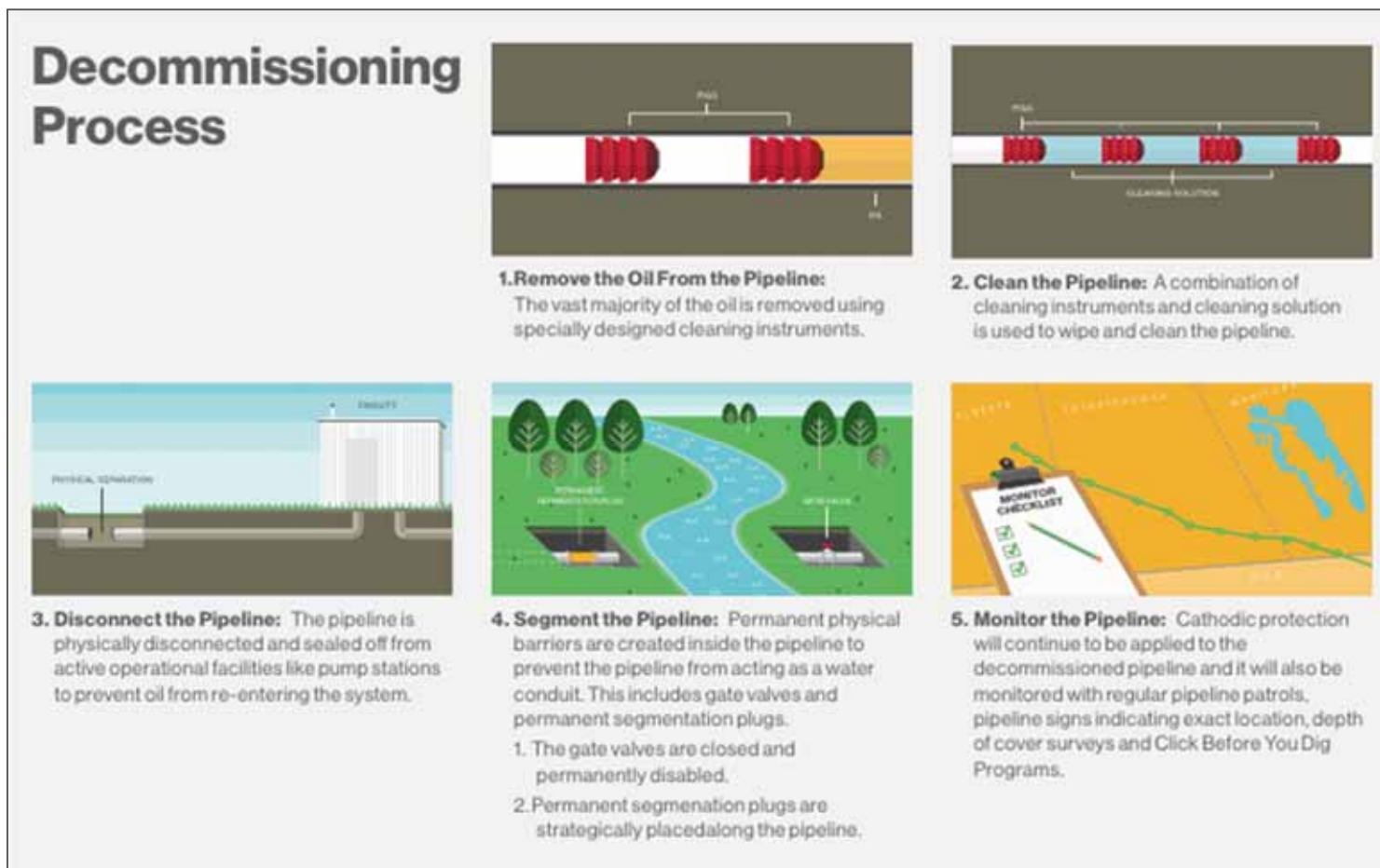
Line 10 Westover Segment Pipeline Decommissioning

Preserving Peace of Mind

- 35 km of the Line 10 Westover Segment Replacement will be decommissioned.
 - Enbridge is responsible for maintaining the decommissioned pipe forever; we monitor them just as we would an active line.
 - Cathodic protection system will be maintained.
 - No visible above-ground changes along the right-of-way.
- Leaving decommissioned sections in place is the safest and least disruptive option.
 - Avoids the use of heavy equipment needed to excavate and remove the buried pipeline, and the associated environmental disturbance with removing the line.
 - Less invasive on landowners.
 - Reduces the risk of soil stability issues that could compromise the integrity of operating pipelines that share the right-of-way.
- Enbridge must apply for and receive approval from the NEB to decommission the existing Westover to Nanticoke Junction segment of Line 10.

Line 10 Westover Segment Replacement Project

The Decommissioning Process



Line 10 Westover Segment Replacement Project

Respecting Local Residents and Stakeholders

- Throughout this process, Enbridge will be driven by a commitment to respect local residents and stakeholders, including:
 - Consulting with communities and identifying special considerations
 - Ensuring safety for the community, the environment and our employees and contractors
 - Respecting the environment by applying our own rigorous environmental standards and policies, as well as complying with regulatory requirements
 - Ensuring proper assessments of potentially sensitive areas before work begins to minimize environmental impact
- As always, we will carefully listen—and respond—to all questions and concerns that stakeholders bring forward

Line 10 Westover Segment Replacement Project

Public Engagement

Opportunities to Engage the Community

- Good working relationships with communities are essential to our operations.
- At Enbridge, we live by our core company values of safety, integrity, and respect, and we are committed to providing you with up-to-date, reliable information about our projects in an open, honest, and respectful manner.
- Program Launch & Community Engagement activities include:
 - Notification and engagement with landowners;
 - Municipal, provincial and federal government outreach and engagement;
 - Notification and engagement with local Aboriginal communities;
 - Notification to emergency response agencies
 - Open Houses and stakeholder roundtable discussions;
 - Ongoing responses to comments, questions, public complaints and concerns; and
 - Ongoing responses to information requests prior to NEB Application.

Line 10 Westover Segment Replacement Project

Safe Pipeline Operation

Seeking 100 Percent Safety

- Pipelines are the safest, most efficient, and most environmentally responsible method of transporting the petroleum-based products that we all use.
 - Since 2012, Enbridge has invested \$3.78 billion on system integrity and leak detection across our crude oil pipeline system.
 - Invested \$4.5 million in emergency response resources in eastern region in 2013-14
- Pipeline safety and reliability begins with prevention:
 - Cathodic protection
 - Sectionalizing valve placement (2 new valves being added)
 - Leak detection and monitoring
 - In-line inspection tools (Smart Pigs)
 - Integrity digs or visual field inspections
 - Regular visual surveillance by land agents and aerial patrol
 - Industry-leading emergency response capabilities
 - Financial assurances in the event of any incident
- In the unlikely event of a leak, Enbridge has robust emergency capabilities to ensure a quick and effective response and we will work hand-in-hand with local emergency responders to ensure an effective response.

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Emergency Response Action Plan

Keeping ER Agencies informed

- Enbridge engages with community emergency responders on Enbridge's Emergency Response Action Plan (“the ER Plan”). The plan will be updated annually based on feedback. Requests to review the plan and comments may be submitted to esm@enbridge.com
- Enbridge welcomes comments/feedback on its ER Plan at any time. Comments for the next version of the Plan should be submitted by September 2, 2015.
- First Responders may retrieve the Emergency Response Action Plan and subsequent updates from Enbridge’s emergency responder information website (www.emergencyresponderinfo.com). This allows any municipal or community first response agency to access plans and subsequent updates as desired.
 - July 30 – Email sent to communities inviting feedback
 - Sept 2 - Cut-off date of Sept 2 for their comments to be considered in this annual plan
- Online emergency responder education program, visit www.mypipelinetraining.com

Line 10 Westover Segment Replacement Project

Contact Information

For More Information

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Comments, Questions and Discussion

