

Panel 2: PIPELINES

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Topics



- Economy
- Liquids Pipeline Transportation
- Liquids Pipeline Safety
- Operations
- Inspections / Integrity Management
- 811 Call Before You Dig
- "Earning Your Trust" Campaign
- PHMSA Inspections

Economy



- Oil and natural gas supply more than 60 percent of the energy needs in the U.S.
- Oil is used in the development of products such as dent-resistant car fenders, soft drink bottles, synthetic fabrics, pharmaceuticals, fertilizers, sporting goods and toys.
- The Great Lakes-St. Lawrence River region is particularly dependent on petroleum products because of the makeup of the regional industry and business mix.
- A coordinated network of refineries, pipelines, terminals, barges and vessels in the Great Lakes-St. Lawrence River region operates 24 hours a day, 365 days a year.

<u>Source</u>: Issues and Trends Surrounding the Movement of Crude Oil in the Great Lakes-St. Lawrence River Region, Great Lakes Commission (Feb. 2015)

November 6, 2015

Liquids Pipeline Transportation



- Pipeline operators delivered 14.9 billion barrels (625.8 billion gallons) of crude oil and petroleum products by interstate pipeline in 2013.
- Pipeline operators operated 192,396 miles of pipeline in 2013. *
- 70% of crude oil and petroleum products were transported by pipeline in 2013.
- More oil is transported through the Great Lakes-St. Lawrence River basin by pipeline than by any other mode. ***

^{*} Source: 2015 Annual Liquids Pipeline Safety Performance Report & Strategic Plan, API-AOPL

^{**} Source: Michigan Petroleum Pipeline Task Force Report (July 2015)

^{***} Source: Issues and Trends Surrounding the Movement of Crude Oil in the Great Lakes-St. Lawrence River Region, Great Lakes Commission (Feb. 2015)

Liquids Pipeline Safety



- Crude oil and petroleum products reached their destination safely by pipeline more than 99% of the time in 2013.
- From 1999 to 2013:
 - Pipeline releases along pipeline rights of way are down 50%;
 - Third-party caused damage to pipelines is down 78%; and
 - Corrosion as a cause of releases from pipelines is down 76%.
- Pipeline operators inspected 47,089 miles of their pipelines with "smart-pig" inline inspection tools in 2013.
- Pipeline operators spent more than \$2.1 billion on integrity management in 2013 evaluating, inspecting and maintaining pipeline infrastructure.

Source: 2015 Annual Liquids Pipeline Safety Performance Report & Strategic Plan, API-AOPL

Operations



- MPL operates 6,000 miles of pipeline in 14 states.
- MPL transports crude oil, refined petroleum products and refinery feed stocks to and from terminals, refineries and other pipelines.
- In 2014, MPL delivered approximately 2.1 million barrels of crude oil and petroleum products daily through its common carrier pipelines.
- High-speed computers, constantly evolving technology, and satellite communications enable MPL to monitor and control its many pipeline systems throughout the U.S. from a single control center in Northwest Ohio.

Operations



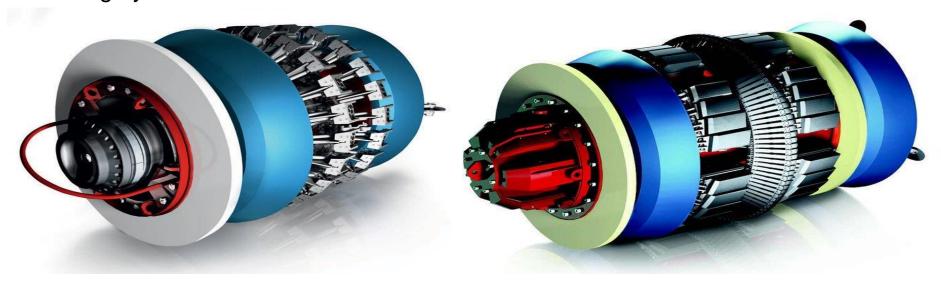
- "Stop-Help-Start"
- MPL's control room process for responding to abnormal pipeline operating conditions.
- It focuses on a disciplined investigation method of first taking the asset to safety, then collecting and analyzing data, and finally resolving the condition.



Inspections / Integrity Management



 MPL utilizes in-line inspection (ILI) tools called "smart pigs" to assess pipeline integrity.



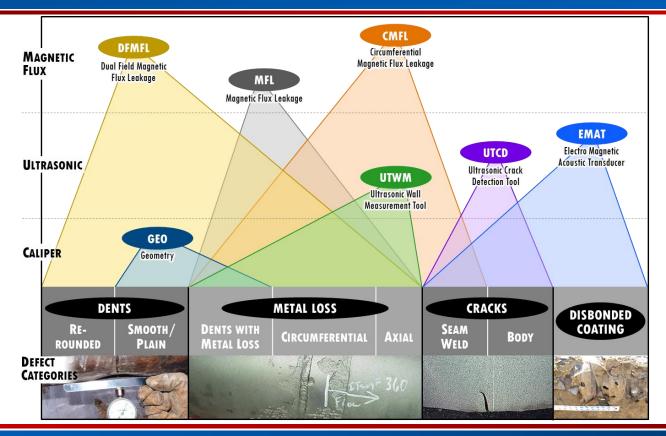
Ultrasonic Wall Measurement / UTWM

Magnetic Flux Leakage / MFL

Inspections / Integrity Management



MPL Uses Multiple ILI Tools to Find Defects and Overlapping Defects



811 – Call Before You Dig



- 811 is the federally-mandated national "Call Before You Dig" phone number.
- It was created to help protect landowners and their contractors from unintentionally hitting underground utility lines while working on digging projects.
- National 811 Day August 11 every year
- It is a valuable resource in preventing 3rd party damage to our pipelines.



"Earning Your Trust" Campaign



- MPL's campaign to reach out to Landowners, Communities, Schools and Emergency Responders.
- Provides MPL employees and contactors with a consistent message when communicating with these four stakeholders.

 Part of our effort to enlist landowners and communities to join us as guardians of our pipelines.



Landowners



Communication Campaign

 MPL is piloting a mailing campaign in 2015 with full rollout in 2016. The campaign will run for five years and will include more frequent contact with landowners and work toward earning their trust while building strong relationships.

811 Day at the Park

 August 11, 2015, MPL hosted over 450 landowners at a picnic and baseball game in 3 different regions.



Communities



- Each MPL operations area gets \$800 to donate to a charity of their choice.
- MPL encourages employees to be involved in the communities where we operate.



Schools



- Over the next 3 years, MPL will meet with the principals of all the schools located within 1000 feet of our pipeline.
- A local emergency responder will be invited to the meeting.
- The discussion will include the school's emergency response plan.



Emergency Responders



- Liaison Program MPL will meet with local emergency responders to identify prevention and response steps related to pipeline emergencies.
- First Responder Grants MPL will provide grants to local first responders so they can attend training sessions or acquire new equipment.



PHMSA Inspections



- PHMSA Integrated Inspections
 - Comprehensive, multi-week inspection of a pipeline system:
 - · Review procedures and records,
 - Interview subject matter experts,
 - · Observe execution of operational tasks,
 - Perform field inspections of facilities and right of ways.
- PHMSA Control Room Inspection
 - Comprehensive review of Control Room Management Plan
 - Operating procedures
 - Roles/responsibilities
 - Alarm management
 - Fatigue management
- All pipeline systems MPL operates (including in the Great Lakes Basin) and MPL's Control Room have been inspected by PHMSA within the last 2 years.





Questions?