

# Virtual **Community Open House Meetings**

May 9-11, 2023

## Meet the speakers:



**Candice Braddock**  
Community Engagement Advisor  
Great Lakes Region



**Brian Buck**  
Manager  
Bay City Area



**Rachel Wellman**  
Regional ER Specialist  
Great Lakes Region



# Safety & Values Moment





# About Enbridge

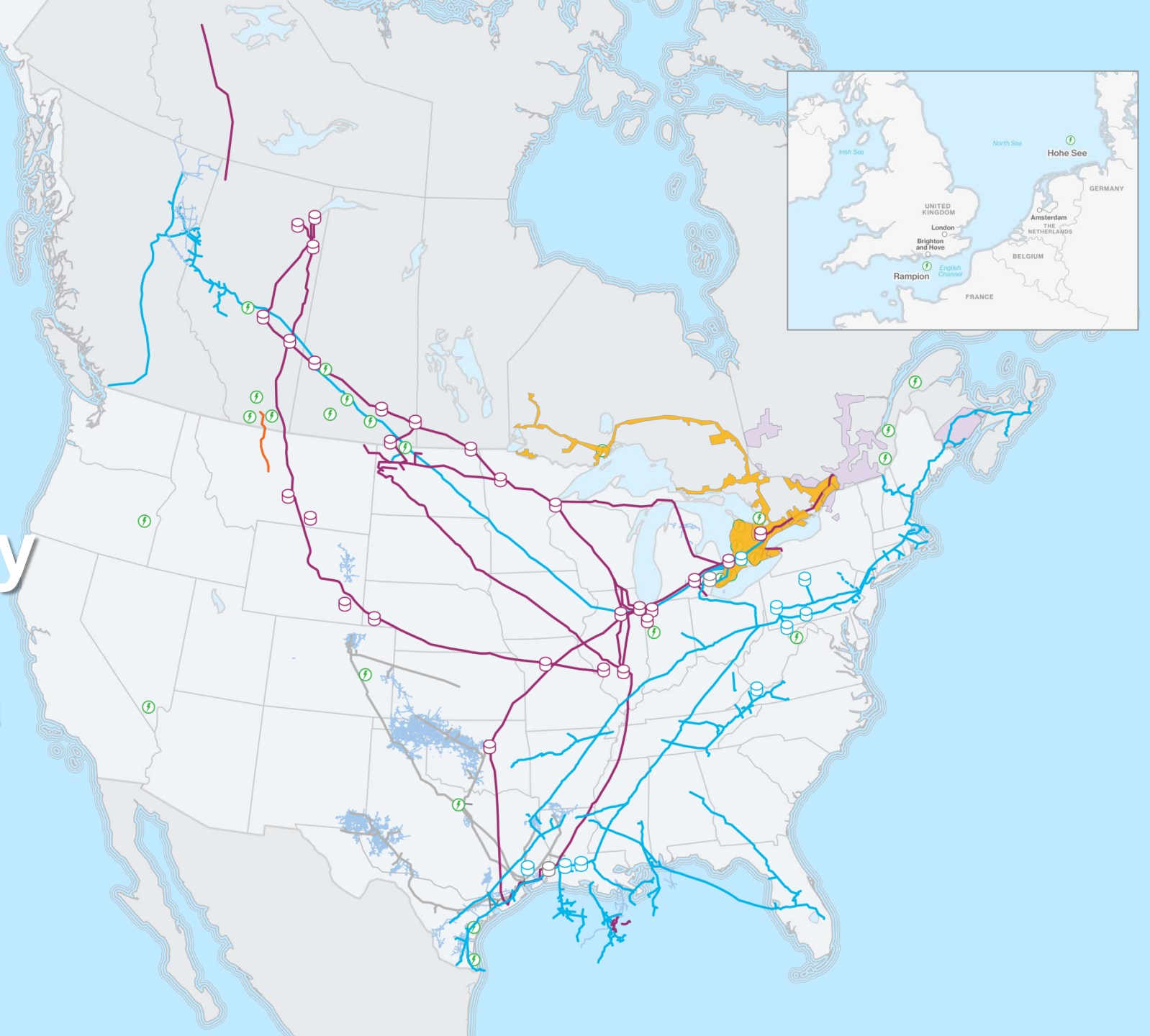
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Delivery and Generation of North American Energy



# Enbridge Story

A leading  
energy delivery  
company in  
North America



# Delivery and Generation of North American Energy

## Energy Infrastructure Leader



**~30%**

of crude oil produced in  
N. America is  
transported by Enbridge

**~20%**

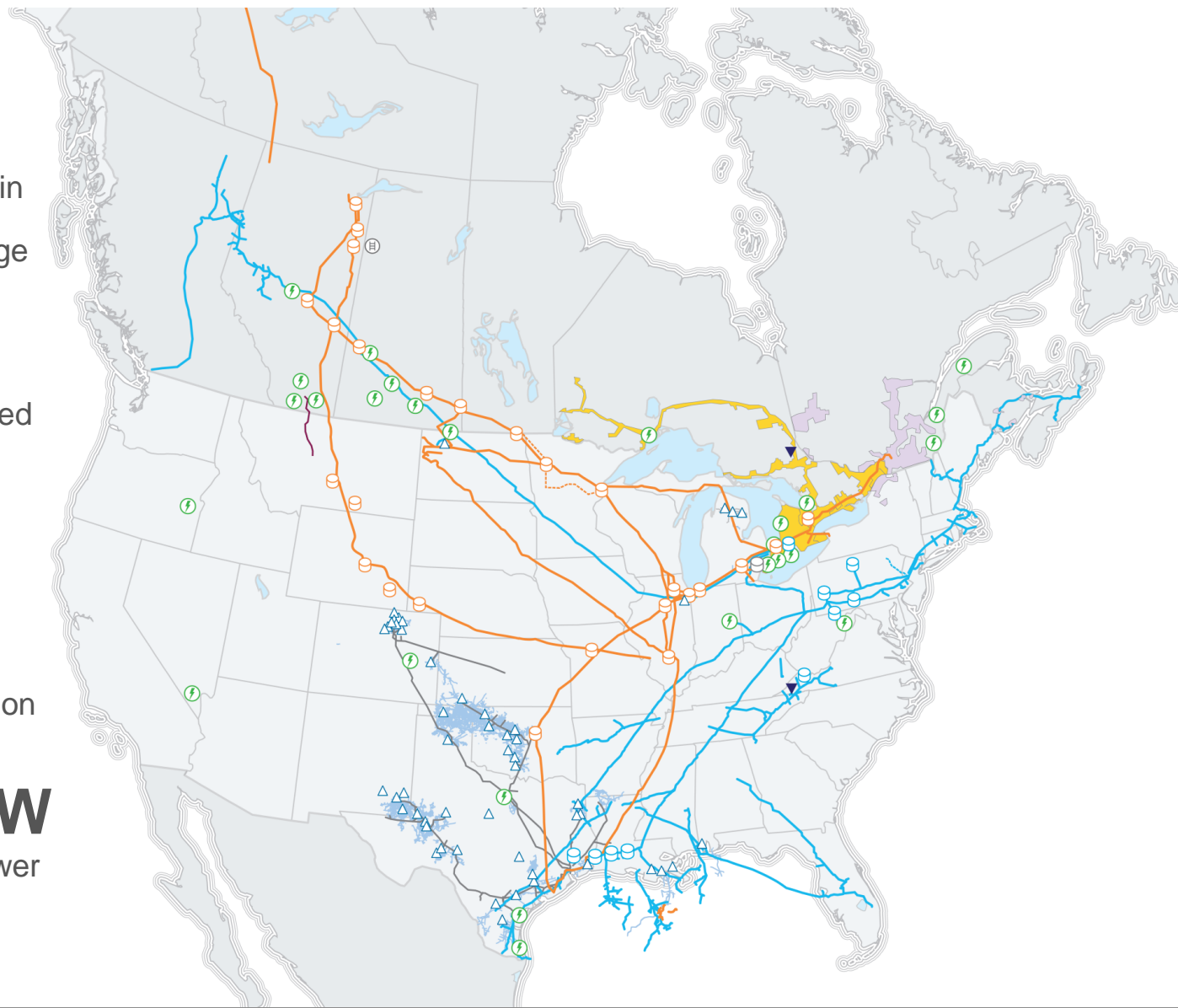
of natural gas consumed  
in the U.S.

**~25.7  
Bcf/d**

of natural gas distribution

**5,000+ MW**

of gross renewable power  
generation



Delivering Crude Oil to Midwest Market and Beyond

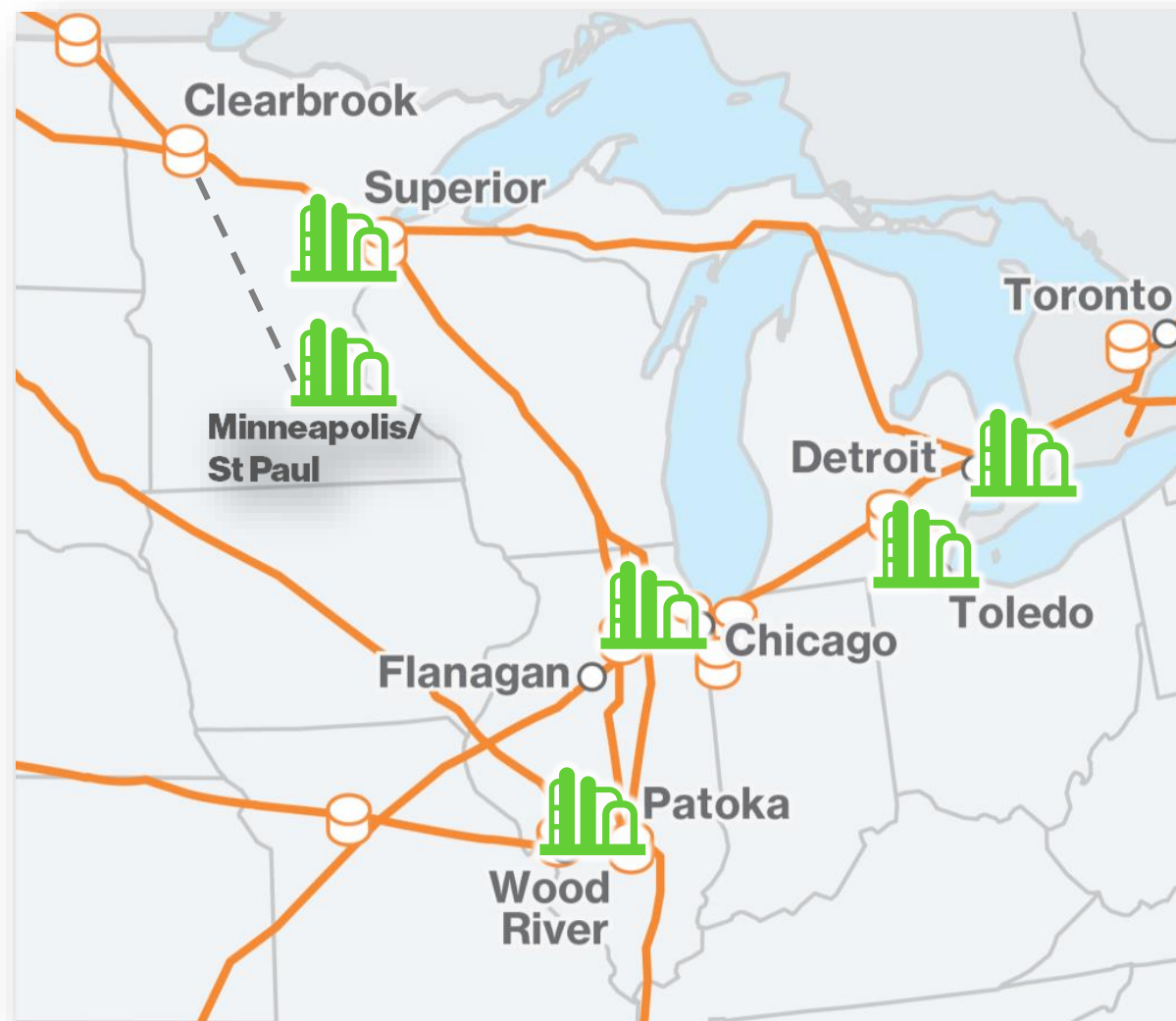
## Enbridge: A Vital Link to Energy Supply



Enbridge meets:

**~70%**

Refining demand  
in broader **Midwest**





# Uses of Petroleum and the Petroleum Products We Use

## Fueling Our Lives



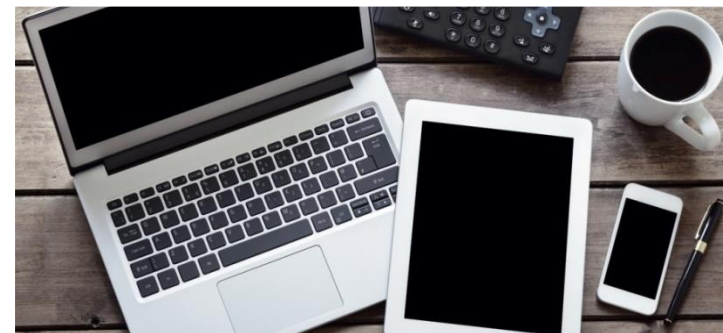
### Household & transportation



### Energy inputs



### Everyday uses of energy





## Our Commitment to Being a Good Neighbor

# Community Investment



- **\$678,700**  
in community and safety strengthening initiatives across Michigan in 2022
- **\$74.6 Million**  
in property and other taxes paid to Michigan in 2022
- **\$254.4 Million**  
In capitol, operating and administrative expenditures in Michigan in 2022
- **\$10.7 Million**  
total wages in 2022 to the 118 employees that live and work in Michigan

# Pipeline Operations, Safety and Maintenance

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# Pipelines and Facilities

## Enbridge in Michigan



### Line 5

A 645-mile, 30-inch-diameter pipeline carrying light crude and Natural Gas Liquids (NGLs) from Superior, WI to Sarnia, ON, Canada. Deliveries are made in Rapid River and Marysville, MI. Injections of Michigan crude oil are made at Lewiston, MI. The remainder of light crude oil and NGLs are delivered to refineries in Ontario, Canada, also providing benefits to Michigan consumers and industry.

### Line 17 (Toledo Pipeline)

An 88-mile, 16-inch diameter pipeline carrying light, medium and heavy crude oil from Stockbridge, MI to Toledo, OH.

### Line 78

A 374-mile, 30-to-36-inch-diameter pipeline carrying light, medium and heavy crude oil from Pontiac, IL to Sarnia, ON, Canada.

### Line 79

A 61-mile, 16-to-20-inch diameter pipeline carrying light, medium and heavy crude from Stockbridge, MI to Van Buren, MI.

### NEXUS Gas Transmission

A 256-mile, 36-inch-diameter interstate pipeline system delivering up to 1.5 Bcf/d of natural gas to markets in the U.S. Midwest, including Michigan, Ohio and the Chicago area.

### Vector Pipeline

A 348-mile, 42-inch-diameter natural gas transmission pipeline originating in Joliet, IL, traversing through Michigan and terminating at the Dawn Hub storage and transport facility near Sarnia, ON, Canada. Vector is a joint venture between Enbridge and DTE Energy Company. It connects with Alliance Pipeline and other pipelines near Chicago, and delivers 1.3 Bcf/d of natural gas to local distribution and end-user customers in Michigan, Illinois, Indiana and Ontario.

### Current operations Liquids

	Line 5	Line 78	Line 17	Line 79
Capacity: (thousands of barrels per day)	540	500	101	80
Pipe size:	30 inch	30/36 inch	16 inch	16/20 inch
Constructed:	1953	2014	1954/1998	1959/2011

### Current operations Natural Gas

	NEXUS	Vector
Capacity: (Billions of cubic feet per day)	1.5	1.3
Pipe size:	36 inch	42 inch
Constructed:	2018	2000



# Enbridge in Michigan- Berrien County





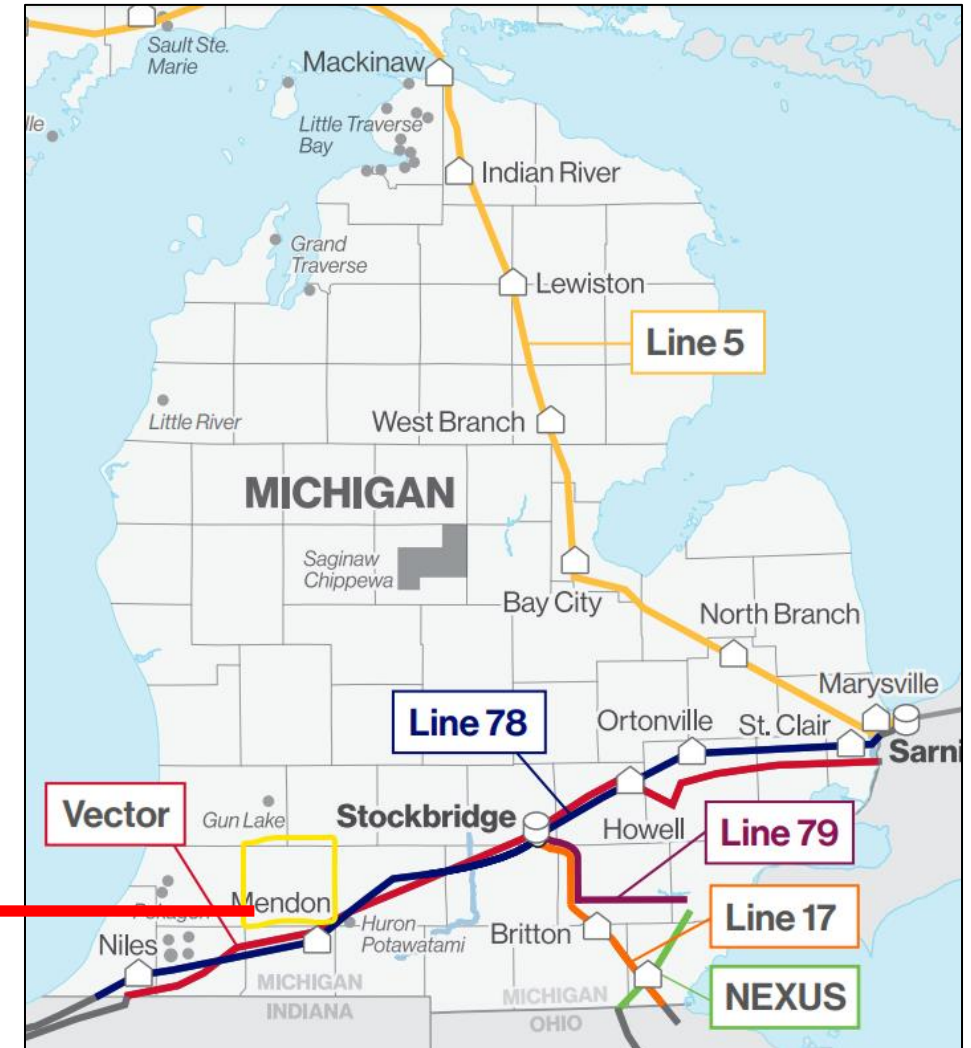
# Pipelines and Facilities

## Enbridge in Michigan- Cass County





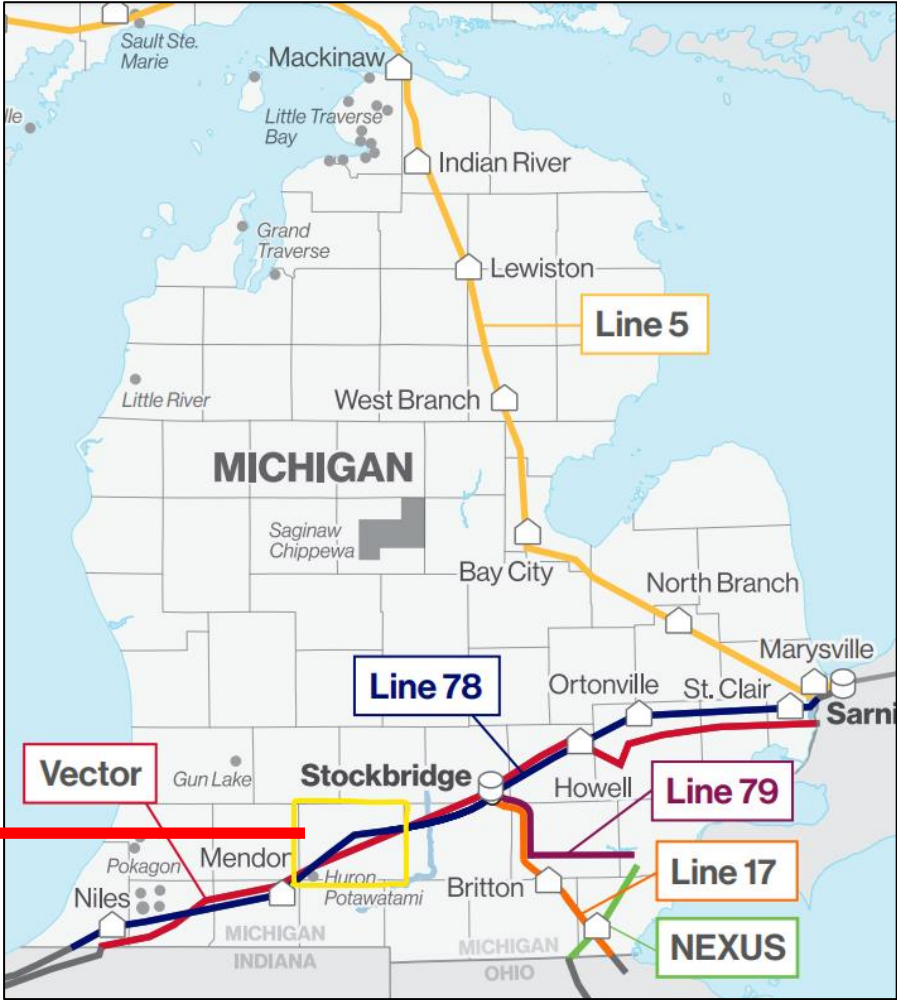
# Enbridge in Michigan- Kalamazoo County





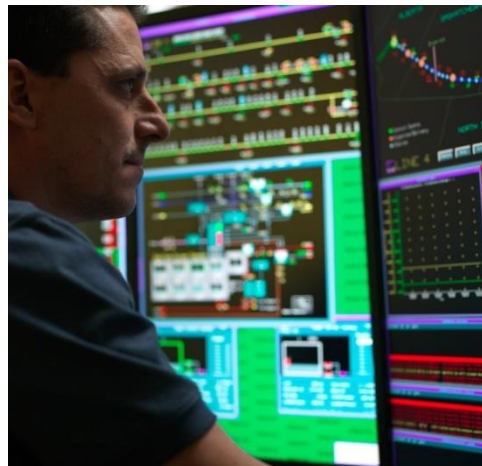
# Pipelines and Facilities

## Enbridge in Michigan- Calhoun County



# Preventative Pipeline Maintenance

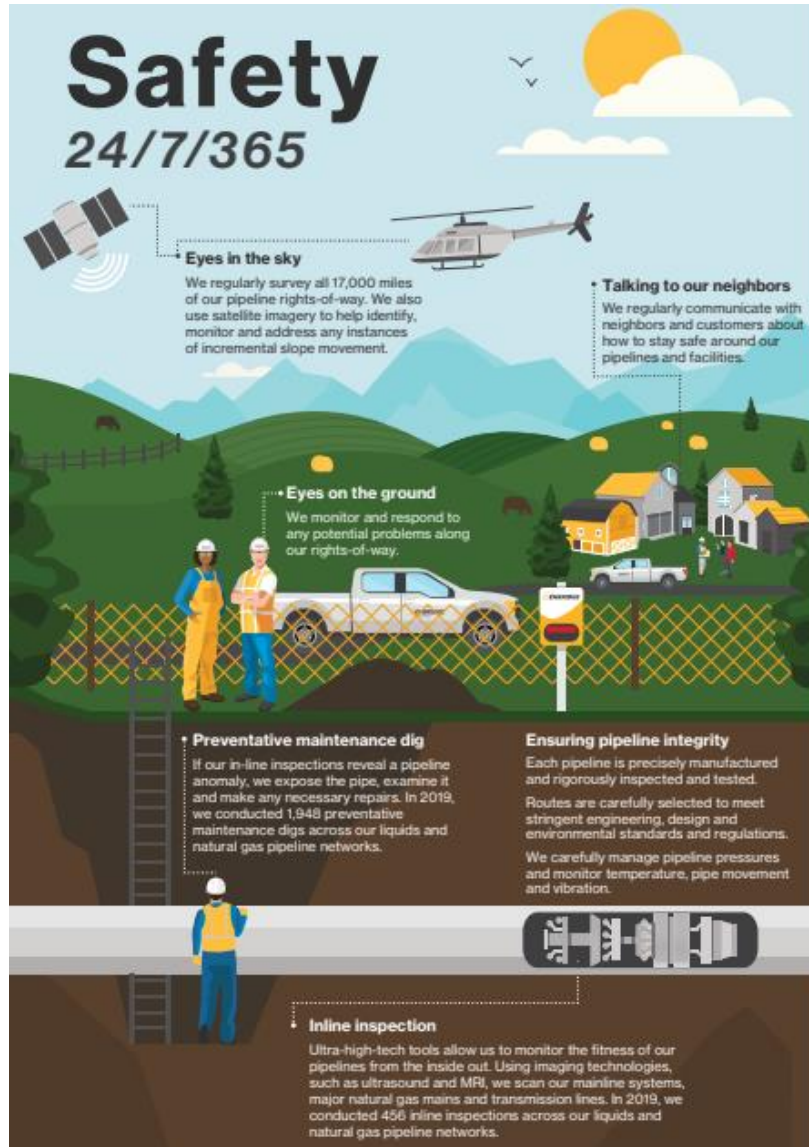
- High quality materials and anti-corrosion coatings
- Cathodic protection and pressure testing
- Inspection programs and preventative maintenance
- Monitoring pipelines and facilities, and maintaining a clear right-of-way





# The Safety of our Communities & Employees is our Top Priority

## Operational Excellence



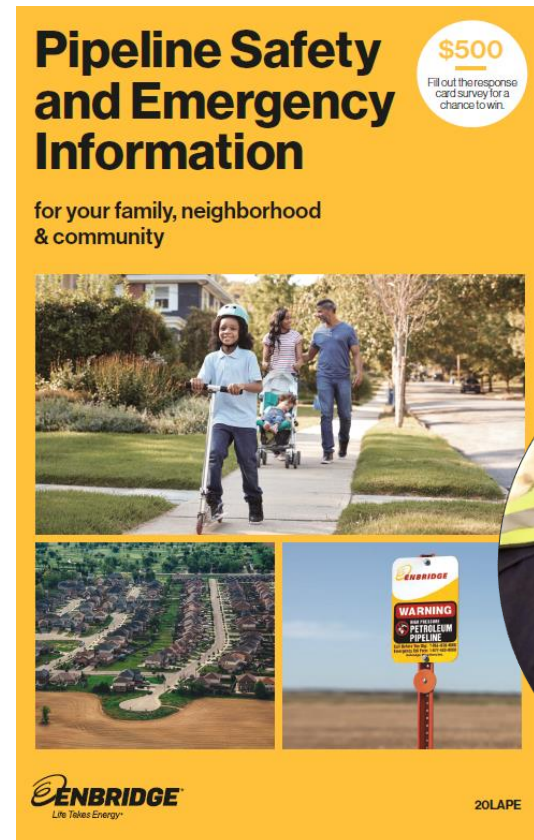
- To keep our employees and contractors prepared, we plan and execute discussion-based and operations-based exercises across our company including:
  - Workshops
  - Tabletop exercises
  - Notification Drills
  - Equipment deployments
  - Functional exercises
  - Full-scale exercises
- \$60 million spent on equipment and training since 2012



# Investing in Pipeline Safety and Operations



- Doubled the size of our Pipeline Control Systems and Leak Detection Departments
- Added staff and enhancing organizational structure at our Pipeline Control Center
- Significantly Enhanced our Public Awareness program
- Proactive and dynamic approach to pipeline integrity management



# Protecting What Matters Most

## Our Commitment to the Environment



### Planning projects with care

- Field survey crews
- Wildlife protection strategies
- Routing along existing corridors
- Consulting with Tribal Governments and groups

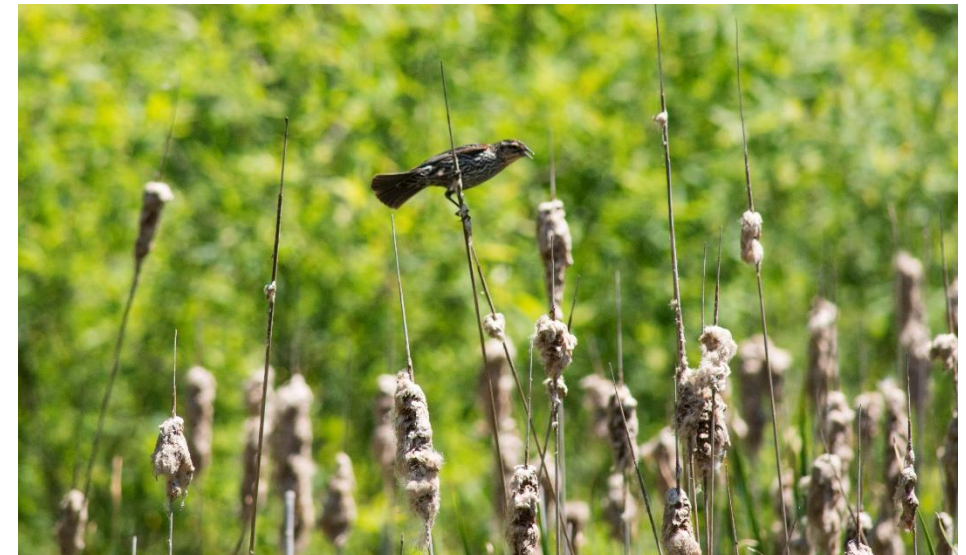
### Limiting the construction footprint

- Use existing routes to and from construction sites
- Minimal ground disturbance practices
- Minimize amount of temporary work space
- Wildlife protection initiatives
- Restricting access to project areas

### Our post-construction commitment

- Environmental monitoring programs
- Landowner consultations
- Habitat restoration techniques

The safety of people,  
and protection of the environment,  
is our top priority at Enbridge.



# Safety Begins with Public Awareness

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# For Your Safety and the Safety of Others

## Call 811 Before You Dig



- 811 is a free, nationwide number designed to keep you safe when digging or excavating
- Calling 811 is a simple process and is always the safest option anytime you are moving dirt
- You can visit [call811.com](https://call811.com) to find out if online locate requests can be made for the state where you will be working.



**Know what's below.  
Call before you dig.**

***Did you know?*** It's never safe to assume the depth of pipelines.

- Pipeline depth can vary or change due to erosion, previous digging projects and other factors
- Some pipelines and related facilities may be located above the ground
- If a product is released from the pipeline, it could damage your property
- If the product released comes into contact with you or ignites, it could cause injuries or even death

## Safety Begins with Awareness

- Other products may also be transported by other pipeline operators in this area
- Product transported in the pipeline is always listed on any pipeline marker
- Familiarize yourself with the products and operators in your area



# National Pipeline Mapping System

## NPMS and Enbridge Resources

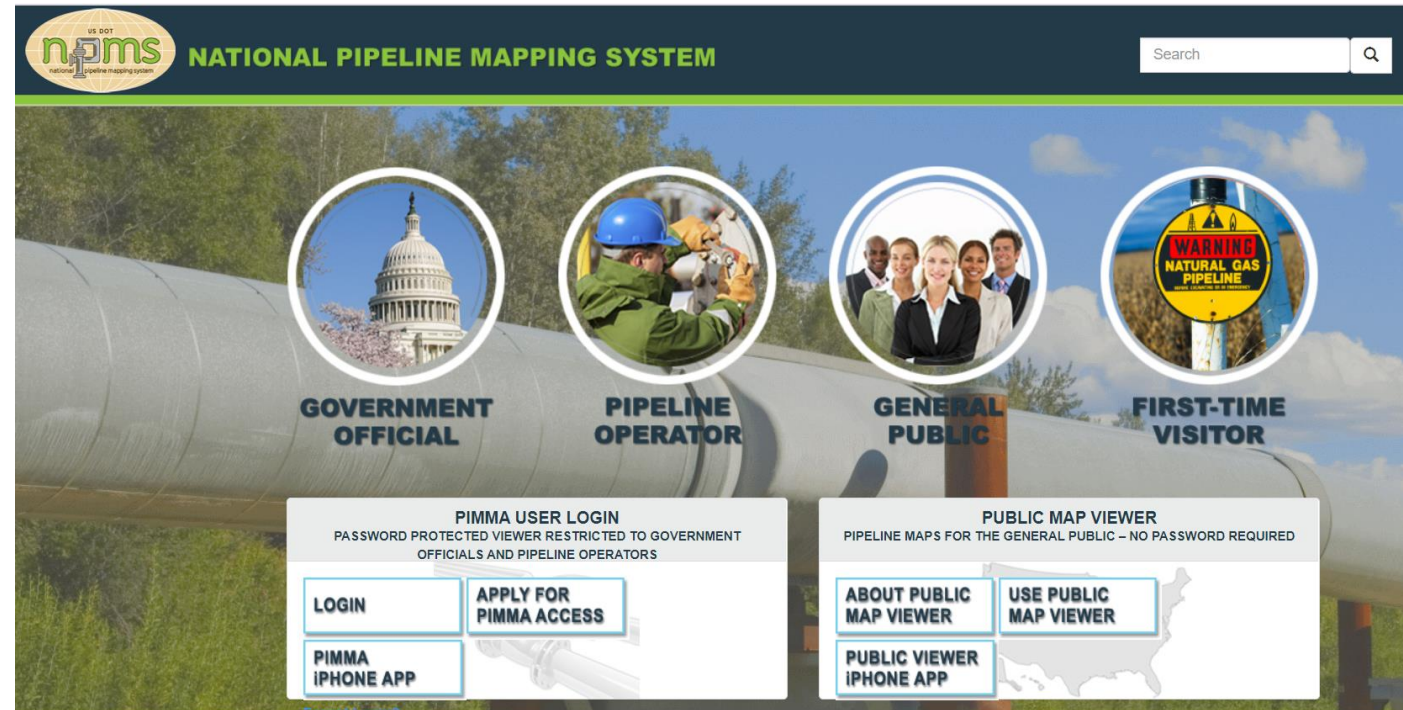


**National Pipeline Mapping System:**  
[www.npms.phmsa.dot.gov](http://www.npms.phmsa.dot.gov)

**Enbridge Land Services:**

**Kameron T. McCrary**  
Lands and Right of Way  
Phone: 517-985-1203

Email: [Kameron.McCrary@Enbridge.com](mailto:Kameron.McCrary@Enbridge.com)



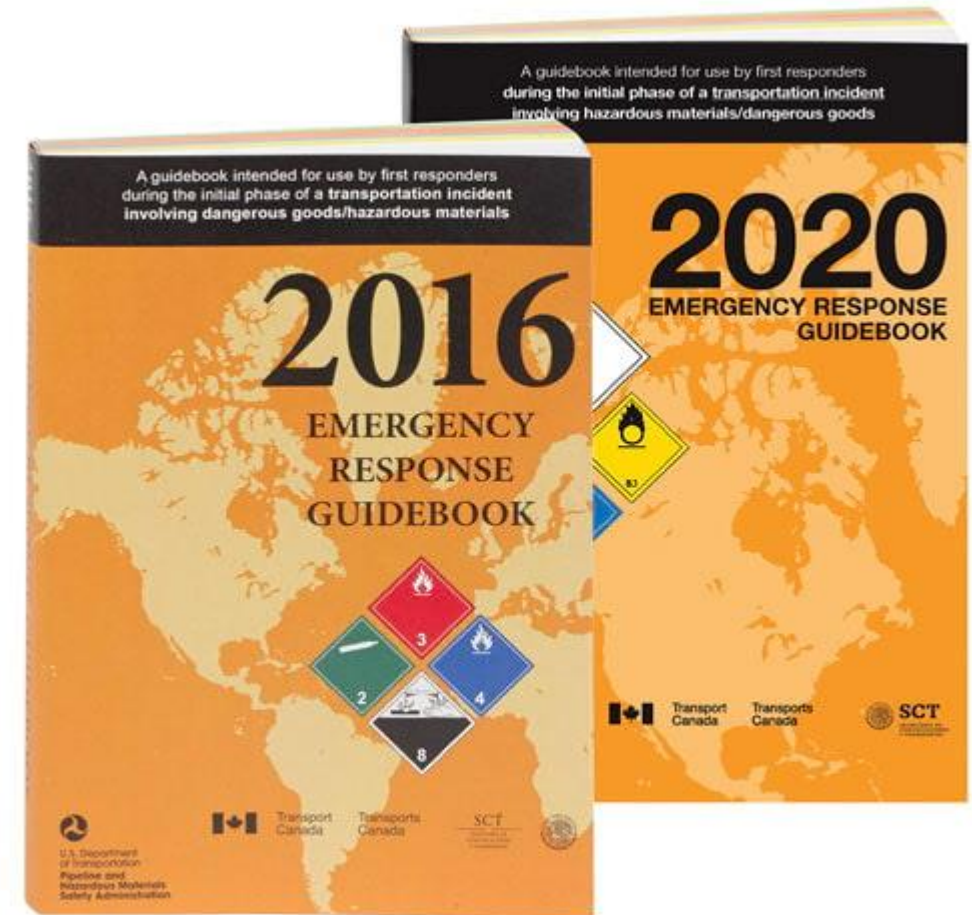


# What to Know About the Products We Transport

## Product Characteristics

### Crude Oil

- Unrefined petroleum
- Color can range from yellow to black
- Flows with the land profile
- Can be thick and slow moving or light and able to move quickly
- May contain hydrogen sulfide (H<sub>2</sub>S) and benzene

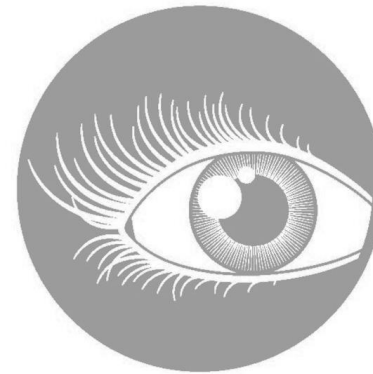


*An updated ERG is published every 4 years*

# How to Recognize a Potential Release

## What Do I Need to Know?

- You might see
  - Dead or discolored vegetation or snow
  - Colorful sheens on water
  - Stains or pools of hydrocarbons or liquids
  - Dirt being blown into the air
  - Fire coming out of the ground
  - Dead animals or insects
  - Construction or excavation equipment nearby
- You might hear
  - An unusual hissing or roaring sound along a pipeline right-of-way
- You might smell
  - An unusual rotten egg odor





# Reporting a Release and Obtaining Information

## What Do I Need to Know?



### To Report a Release:

- Call 911
- Call Enbridge  
**800-858-5253**
- National Response Center  
**800-424-8802**
- EPA, Region 5 - MI  
**312-353-2318**
- Enbridge.com
- [www.facebook.com/enbridge](https://www.facebook.com/enbridge)
- Twitter: @Enbridge
- Or, [epa.gov/emergency-response/emergency-response-my-community](https://epa.gov/emergency-response/emergency-response-my-community)

If you can do so safely, turn off any mechanized equipment. Move as far away from the leak as possible in an upwind direction, avoiding contact with escaping liquids and gases.

# Emergency Response

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# Response Planning with Federal, State and Local Interest

## Planning Integration



- Enbridge works closely with Federal, State and Local interests during:
  - Training
  - Exercises
  - Plan Development
- Incident Command System
- Unified Command



## Response Equipment **Prepared to Respond**



- Enbridge keeps spill response equipment in strategically placed caches throughout our pipeline system.
- In addition, we have contract agreements with federally certified response organizations, also known as Oil Spill Removal Organizations (OSROs), that can assist us in the event of a large spill.



## What to do if you suspect a pipeline leak:

- **Make sure you're safe**
- **Call 911**
- **Call Enbridge emergency response number**
- **Follow instructions provided**

## How to report a spill to Enbridge, NRC and the EPA:

- **Enbridge: 800-858-5253**
- **NRC: 800-424-8802**
- **EPA, Region 5 (MI): 312-353-2318**

## How do you obtain information:

- **Enbridge.com**
- **facebook.com/enbridge**
- **Twitter: @Enbridge**
- **[epa.gov/emergency-response/emergency-response-my-community](https://epa.gov/emergency-response/emergency-response-my-community)**



# Q&A

**For more information, please visit:**  
[www.enbridge.com/MichiganHandouts](http://www.enbridge.com/MichiganHandouts)

**Email us:**  
[EnbridgeInMI@enbridge.com](mailto:EnbridgeInMI@enbridge.com)

A copy of this presentation will be available for download at:  
[www.EnbridgeConnect.com](http://www.EnbridgeConnect.com)

