

Enbridge's emergency response readiness



Staying prepared: Living our commitment

We hope we never have to respond to a pipeline leak. But if we do, we're ready.

Enbridge maintains strong emergency preparedness and response systems that we regularly test and continuously improve alongside local first responders, emergency management officials, and law enforcement.

In the event of an incident, Enbridge personnel and contractors have robust and tested emergency response expertise, training, and equipment to ensure a safe, speedy and effective response.

Why focus on emergency response?

Prevention is a critical component of pipeline safety, and we focus on prevention at Enbridge before issues arise. While our ultimate goal is to prevent all spills and releases, we're also committed, as a responsible pipeline operator, to providing a comprehensive incident response at any point along our pipeline network.

Our company-wide Enbridge Enterprise Emergency Response Team (E3RT) was created in 2012 and trained to respond to large-scale incidents across North America that would require more resources than a single Enbridge operating region or business segment could provide.



To keep our employees and contractors prepared, we stage regular simulation exercises and drills in all of our operating regions, such as:

- Tabletop exercises, including E3RT events;
- · Equipment demonstration events; and
- Full-scale simulation and resource deployment events.

During these exercises, our employees and contractors—usually in concert with local and regional first-response agencies—participate in full-day staged simulations of a pipeline spill, with our full response coordinated in real time.

During these drills, observers from local first responders, agencies, government and industry often observe the process and earn a firsthand look at how we are prepared to react in the event of a large-scale incident. It also gives them the opportunity to provide feedback on how they would respond or assist during a pipeline emergency.

We believe all incidents can be prevented at Enbridge. No incident, spill, or release will ever be acceptable to us.

Upon detecting a potential problem, our operations center will close remotely controlled isolation valves immediately, with full closure occurring within three minutes of activation. Our local operations staff will quickly initiate a response alongside local emergency management teams. In the Straits, that includes the U.S. Coast Guard, the Michigan Department of Environmental Quality and Department of Natural Resources, the U.S. Environmental Protection Agency and other essential local partners.

We will also rapidly dispatch a trained response team, including environmental crews who have a strong understanding of the products we transport.

Testing and improving

We are also committed to testing Enbridge's emergency response tactics and strategies, to strengthen the bonds of preparedness and promote a safe, speedy and effective response when necessary. Enbridge

employees in U.S. and Canada participate in regular emergency response drills and full-scale simulations, many involving local first responder groups, to test and improve our procedures.

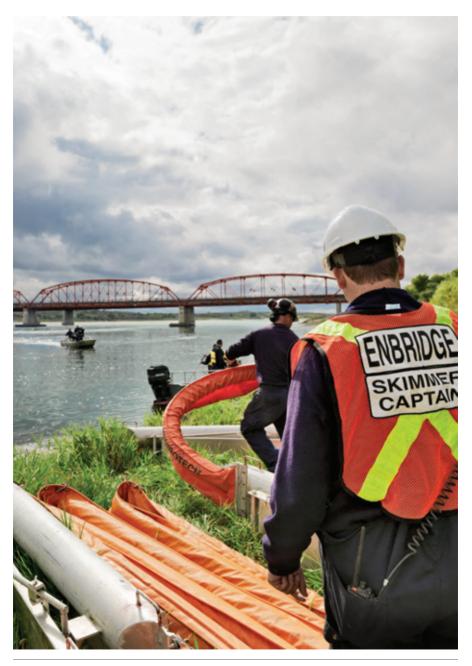
On average, we've conducted more than 400 drills, exercises, and emergency equipment deployments across our company a year since 2012.

We also spent about \$74 million between 2012 and 2014 on training and new response equipment, ranging from boom to boats, and deployed them across our systems.

Using the ICS protocol

Enbridge's emergency response drills and simulations use the Incident Command System (ICS), an emergency response system used across North America by military, first-response agencies, and local, state/provincial, and federal governments.

ICS enables Enbridge employees and contractors to react quickly and efficiently to the emerging issues and challenges that are inevitable in a real-life emergency response. That common, across-the-board understanding of ICS, and implementation with other response partners, helps to make our emergency response safer, more efficient, and more effective.



> Enbridge employees participate regularly in emergency response drills and full-scale simulations to test and improve our emergency response procedures.

In September 2015, we put our emergency response readiness to the test with an Enbridge emergency response exercise in the Straits of Mackinac.

The exercise included tactical equipment deployment, public notification, shoreline cleanup assessment, deployment of an air monitoring team, education of first responders on oil hazards, and a wildlife recovery exercise coordinated by our environment team.

Numerous first-response agencies were active participants, including:

- The U.S. Coast Guard;
- The U.S. Environmental Protection Agency;
- The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA);
- The Michigan Department of Environmental Quality;
- The Michigan Department of Natural Resources: and
- Local emergency management and law enforcement.

We conduct exercises like this to evaluate our own response, and at the end of the drill, as we do in all full-scale simulation exercises, we review our successes and target areas of improvement—using those lessons to bolster emergency response readiness.

Boom, boats, and more

Our simulation exercise on September 24 allowed participants from Enbridge and various response agencies to further familiarize themselves with the latest in response and recovery equipment.

Out in the Straits, the following equipment was deployed:

- The U.S. Coast Guard cutter Alder:
- Oil Spill Recovery Vessels (OSRVs):
- Response vessels:
- Rescue boats, assault boats, and landing craft;
- U.S. Coast Guard auxiliary boats;
- A weather monitoring vessel;
- Tugboats; and
- Barges.

Numerous pieces of containment and recovery equipment also got a workout, including:

- Vacuum trucks:
- Hundreds of feet of air and sorbent boom;
- Skimmers: and
- A decontamination trailer.



Shoreline cleanup crews

The simulation exercise involved a mock shoreline cleanup assessment technique (SCAT) deployment. Two teams, involving personnel from Enbridge, the State of Michigan, and the U.S. Coast Guard evaluated impacts to the shoreline, and recommended and initiated cleanup options.

Wildlife rehabilitation workshop

Representatives of Tri-State Bird Rescue and Rehabilitation, Inc., conducted an oiled wildlife workshop. This classroomsetting workshop provided a hands-on opportunity to practice handling oiled wildlife in the event of a spill, including capture, washing, and rehabilitation, and certified participants to assist with impacted wildlife in the future.

We have tailored and detailed emergency response plans, region by region, that govern our response for all types of situations.

These plans consider all the factors that influence the behavior and potential impact of a release—including drinking water, flow of running water, air emissions, wildlife and animal livestock, and shoreline impacts.

In the event of an emergency near the Straits of Mackinac, we can draw upon considerable combined resources. We have significant supplies of equipment and resources near the Straits, and these resources can be moved and concentrated at any point along Line 5 to support a response.

We've developed a tactical response plan for the Straits of Mackinac in tandem with the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). This plan has been tested via full-scale emergency response exercises—including one in September 2014 at Indian River—involving key agencies such as the U.S. Coast Guard, PHMSA, the U.S. EPA, and local authorities.

We've also got a plan in place in the event of an oil release during winter, when the Straits are iced over. In the event of an incident, Enbridge, the U.S. Coast Guard, and oil spill removal organizations would actively respond with containment and recovery resources, including equipment that's based in the Straits and is available for rapid deployment. We tested this plan, along with the U.S. Coast Guard and other response partners, during a full-scale simulation exercise at St. Ignace, Michigan, in January 2012.



Enbridge's full-scale simulation exercise at St. Ignace, Michigan, in January 2012 involved the U.S. Coast Guard and other response partners. The exercise involved practicing oil containment and removal techniques, as well as testing and deploying equipment, such as ice and fire boom and Arctic-specific skimming equipment, in harsh winter conditions.

Working with emergency response groups

We are committed to maintaining robust emergency response plans near all our pipelines and facilities. We update these plans regularly, making them available to local first responders along our pipeline rights-of-way.

We also meet regularly with those first responders—including police, fire, and EMS—to share Enbridge's emergency response procedures, and identify the roles and responsibilities of external responders who would support Enbridge in the event of an incident.

In-person engagement

Enbridge launched the Emergency Response Ambassador initiative in 2013 as part of our U.S. Public Awareness program.

Our employee ambassadors have built meaningful relationships with emergency responders near our pipelines and facilities—arranging presentations, facility tours, and tabletop exercises.



Free, online training

Enbridge's Emergency Responder Education Program, another facet of our public awareness outreach, offers free, unlimited online training and pipeline emergency response tactics for first responders near our projects and operations.

We've also expanded this program with a training module targeted specifically at 9-1-1 call center personnel, so that they are equipped, if necessary, to initiate a safe and effective response to a pipeline incident.

@enbridge blog: Indian River Emergency Response Exercise

Posted September 29, 2014

Enbridge connects North Americans to the energy they need for their quality of life. We take this job seriously, and we're committed to doing it safely and responsibly.

That was the motivation behind a multiagency emergency response training exercise, coordinated by Enbridge, on September 17, 2014 along the Indian River in Cheboygan County, Michigan.

More than 18 months in the planning, this full-scale emergency drill involved more than 300 representatives from Enbridge, the U.S. Coast Guard, the U.S. Environmental Protection Agency, the Michigan Department of Environmental Management, the Great Lakes Commission, and local emergency responders.

"In our commitment to safety and operational reliability, we focus on prevention before issues arise. But we also want to be as prepared as possible in the unlikely event of an incident, and that means having detailed emergency response plans in place—and holding regular emergency response exercises as we did at Indian River," says Brad Shamla, Vice President of U.S. Pipeline Operations.

The Indian River full-scale exercise, based along our Line 5 crude oil pipeline on the northern tip of Michigan's Lower Peninsula, saw crews respond to a simulated emergency based on a third-party contractor striking the pipeline while performing maintenance work.



Field exercises included: equipment deployment at multiple locations on water; public notification; dispatch of an air monitoring team; protection of water intakes and public parks; shoreline-cleanup assessment; educating first responders on pipeline emergencies; measurement of response times; and a wildlife recovery exercise coordinated by Enbridge's environment team.

Detailed plans guide our emergency response, and are based on specific types of terrain, including water crossings. These plans include strategic storage of emergency response equipment across our regions for quick deployment, and personnel—including employees, contractors, and response organizations—on standby to respond immediately.



For the Indian River exercise, we also invited special guests—including elected officials and representatives of environmental groups—to tour the simulated response area via bus, boat, and helicopter.

"We feel that the Indian River emergency response exercise helped strengthen relationships among Enbridge, response organizations, public officials, media, and local business owners," says Shamla. "In the event that a pipeline release does occur, those relationships will be crucial to an effective response."



Enbridge holds regular full-scale simulation exercises involving first-response agencies, including this exercise in September 2014 at Indian River, Michigan.

We want to hear from you

We want to address any concerns that you may have. You can get in touch with us at any time.

Here's how:

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