

State wants answers on condition of Mackinac pipeline

Keith Matheny, Detroit Free Press Published 5:15 p.m. ET March 9, 2017 | Updated 9:45 a.m. ET March 10, 2017



(Photo: National Wildlife Federation)

Are twin, 64-year-old oil and gas pipelines at the bottom of the Straits of Mackinac losing their protective covering?

State Attorney General Bill Schuette and the heads of the state departments of Natural Resources and Environmental Quality, would like a straight answer to that question from Canadian oil transport giant Enbridge, the owner and operator of Line 5 in the Straits.

In a letter to Enbridge Vice President of U.S. Operations Brad Shamla on Wednesday, Schuette, along with DNR Director Keith Creagh and acting DEQ Director C. Heidi Grether, called on the company to provide detailed information on so-called holidays on Line 5 — an oil and gas industry term for areas on a pipeline where anti-corrosive coating is missing.

Read more:

[Michigan residents on pipeline route face eminent domain lawsuit \(http://www.freep.com/story/news/local/michigan/2017/02/27/michigan-pipeline-route-eminent-domain/98484502/\)](http://www.freep.com/story/news/local/michigan/2017/02/27/michigan-pipeline-route-eminent-domain/98484502/)

[Enbridge denies own report noting Straits oil pipeline losing coating \(http://www.freep.com/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/\)](http://www.freep.com/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/)

In an Enbridge-prepared report dated Sept. 27 of last year, the company proposed to conduct sampling to examine the impact of invasive zebra and quagga mussels, as well as impacts from other aquatic organisms, at various locations along the pipelines, including the "limited numbers of areas of the pipeline where there is a loss of coating around the pipe ('holidays')."

The "Biota Investigation Work Plan," compiled for the U.S. Environmental Protection Agency, was a requirement of Enbridge's \$177-million settlement with the U.S. government for the 2010 Line 6B oil pipeline spill into the Kalamazoo River — the largest inland oil spill in U.S. history, taking four years and more than \$1 billion to clean up — and another 2010 spill in Illinois.

Enbridge spokesman Ryan Duffy told [The Free Press](http://www.freep.com/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/) last month ([/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/](http://www.freep.com/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/)) that the report "works off some hypotheticals," adding, "There's not exposed pipe anywhere down there that we've ever seen, surveyed, anything like that."

But the report not only refers to the areas missing covering as existing facts, it includes illustrations mapping where they are on the pipes, 19 areas Enbridge states it will test for corrosion.

In their letter to Enbridge, Schuette, Creagh and Grether also note that Enbridge's plan states it was prepared, in part, by "assessing video photography of the dual pipelines from 2014 and 2016 (underwater inspections)." A later portion of the plan states, "At each of the holiday areas where bare metal is exposed," cathodic protection of the pipe against corrosion will be recorded.

Read more:

[After Standing Rock, rally focuses on Michigan water issues \(http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/12/05/standing-rock-rally-focuses-local-water-issues/95025202/\)](http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/12/05/standing-rock-rally-focuses-local-water-issues/95025202/)

[State approves plans for 4 new Mackinac pipeline supports \(http://www.freep.com/story/news/local/michigan/2016/10/04/state-approves-plans-4-new-mackinac-pipeline-supports/91526844/\)](http://www.freep.com/story/news/local/michigan/2016/10/04/state-approves-plans-4-new-mackinac-pipeline-supports/91526844/)

"Enbridge representatives have been quoted as saying that the 'holidays' were merely 'hypothetical,'" Schuette, Creagh and Grether stated in their letter to Shamla. "Such a suggestion is, at a minimum, confusing in light of the terms of the plan itself."

It's more than confusing, said Michigan Sierra Club Chairman David Holtz.

"Enbridge seems to be saying, 'Don't trust your lying eyes,'" he said.

The twin pipelines carry up to 23 million gallons per day of light crude oil and liquid natural gas through the Upper Peninsula, then south through the Lower Peninsula before reaching a hub in Sarnia, Ontario. The pipelines have been at the center of a years-long debate over whether they should continue to operate in the Straits, given the widespread impact a major oil spill from the lines would have on the Great Lakes and shoreline communities.

"Every day that pipeline operates in violation of the easement with the state is a day closer to catastrophic disaster in the Great Lakes," Holtz said.

Duffy, in an e-mailed statement to the Free Press today, said company officials plan to clarify the holidays issue at the state Pipeline Safety Advisory Board meeting slated for Monday afternoon in Lansing. The board, commissioned by Gov. Rick Snyder, has contracted engineering studies under way, examining worst-case-scenario risks from a pipeline spill on Line 5 in the Straits, as well as an alternatives analysis looking into whether other options exist to move the oil and liquid natural gas that would pose less potential risk to the Great Lakes.

"In this process, we have been working closely with the State of Michigan to provide them with information on our safe operation of Line 5, and we will continue to do that," Duffy stated.

Schuetz, Creagh and Grether also called on Enbridge to share all photos, videos, test results and other inspection documents from all of its inspections of Line 5 in the Straits since a 2014 inspection whose results were already shared with state officials.

"Part of the job of the attorney general is to seek out truth and find out the full story, and that is what we're doing here," Schuetz spokeswoman Andrea Bately said. "We're looking for as much information as possible, to provide as much clarity as we can, to understand everything that's going on with the pipeline."

The nonprofit National Wildlife Federation on Thursday released [a report \(http://blog.nwf.org/wp-content/blogs.dir/11/files/2017/03/2017-Edward-Timm-Currents-and-Stresses-Report.pdf\)](http://blog.nwf.org/wp-content/blogs.dir/11/files/2017/03/2017-Edward-Timm-Currents-and-Stresses-Report.pdf) by retired Dow Chemical engineer Ed Timm finding that the currents under the Straits of Mackinac are nearly double the assumption used in 1952 to design the pipeline. Timm's report questions whether Line 5 inspections have historically been comprehensive enough and states his belief that evidence exists that the underwater pipelines are showing signs of fatigue.

Combined with the weight of tens of thousands of zebra and quagga mussels — which were not in the Great Lakes when the pipeline was designed — and sections of the pipeline that have not been supported as required by the state, Timm concludes that the pipeline may not be "fit for service," which is a requirement for pipeline operations.

"When Enbridge Line 5 under the Straits of Mackinac was designed by Bechtel Inc., in 1953, the maximum current they expected it to be subjected to was 2.25 m.p.h.," Timm said. "Since 1991, four different measurements of the maximum current velocity in the vicinity of the pipeline have measured peak current events where the velocity is nearly twice this value."

"These peak current events have been calculated to apply enough force to the pipeline to permanently bend and fatigue exposed sections of the pipe. ... While I cannot prove conclusively that Line 5 is an imminent hazard because of these calculations, Enbridge certainly cannot prove there is not a problem here, and the line should be restricted until appropriate studies are done to get to the bottom of this subject."

Duffy pointed to a study of the underwater section of Line 5 conducted last May for the federal Pipeline and Hazardous Materials Safety Administration.

"It looked at 20 years of inspection reports for pipe movement along with metal loss, cracking and deformation," Duffy said. "It determined that no locations required additional attention in the East or West sections of the Line 5 Straits crossings and that current inspection frequency was appropriate given the condition of Line 5."

But Timm's report speaks for itself, said Michael Shriberg, director of the National Wildlife Federation's Great Lakes Regional Center.

"This adds to the mounting evidence that we need to take a serious look at Line 5 safety right now, as we work to decommission it," he said.

"We can argue about the exact level of risk, the exact shape of the pipeline. What we know is there's a significant cause for concern, and that if there were a rupture, it would be catastrophic."

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