



The Honorable Rick Snyder
Office of the Governor
P.O. Box 30013
Lansing, Michigan 48909

March 27, 2017

Attorney General Bill Schuette
G. Mennen Williams Building, 7th Floor
525 West Ottawa Street
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VIA Electronic Submission

Dear Governor Snyder and Attorney General Schuette:

Thank you for your reply letter dated March 8, 2017, regarding the Enbridge Line 5 dual pipelines in the Straits of Mackinac and the State's legal public trust obligation to affirmatively uphold and enforce the express terms of the 1953 Easement, the Great Lakes Submerged Lands Act (GLSLA), and Michigan Environmental Protection Act (MEPA), which authorize Enbridge to operate these aging oil pipelines in the Great Lakes.

The State of Michigan Has an Independent and Separate Legal Duty to Enforce the Public Trust as the Paramount Interest of Our Waters; Actions of Task Force and Advisory Board Do Not Abdicate the Fiduciary Duties of the State of Michigan

In the Oil & Water Don't Mix campaign's letter dated February 17, 2017, we identified new evidence from Enbridge itself that revealed strong evidence of missing protective pipeline coating in direct violation of the 1953 Easement. On March 9, 2017, FLOW (For Love of Water) then sent another letter to the State of Michigan, pointing not only to violation evidence from Enbridge but also independent technical evidence from Dr. Timm on Line 5 pipeline corrosion and fatigue due to powerful currents. Evidence from both sources includes calculations and evaluations revealing missing coating, corrosion, erosion, and other design failures and/or weaknesses.

As you are aware, the failure to adequately maintain the Line 5 pipelines, including a lack of supports to prevent bending of the dual pipelines, is a breach of Enbridge's 1953 legal easement agreement with the State of Michigan that allows the company to occupy public waters and state bottomlands. The failures documented in both the Enbridge and Timm reports add to the mounting evidence that the transport of crude oil through this pipeline infrastructure endangers and is likely to impair or pollute the Great Lakes, its ecosystem, public and private property, and public health and safety. While information continues to be

gathered, the state must accept that there are areas of missing pipeline coating and vulnerabilities related to the powerful underwater currents.

Because this new evidence suggests a substantial likelihood of pollution and impairment to trust resources, the State of Michigan has an independent fiduciary duty to take immediate precautionary action and to enforce its legal obligations to protect our public waters. All parties, including the state, have admitted that the potential magnitude of harm to the Great Lakes, and related water and aquatic resources and public property, public health, and safety is unacceptable. Given the high degree of risk, the obligations of the state, and you as its leaders, are to put these serious cognizable public interests above the interests of Enbridge as a private occupant of Great Lakes bottomlands and waters. Public trust interests associated with the Great Lakes are by Michigan Supreme Court decisions paramount to Enbridge's interest under the 1953 Easement. Enbridge took the easement subject to this public trust, and does not and cannot have greater rights or control than the State of Michigan and you as our trustees. Therefore, at a minimum, we expected that the State of Michigan would send to Enbridge a written notice of violation of the 1953 Easement. This would require Enbridge to take immediate action during the continuing review, rather than defer to Enbridge pending many more months of study and evaluation.

Unfortunately, your March 8, 2017, reply defers to Enbridge and its control, rather than affirmatively asserting and protecting the paramount state public trust interests and duties. In effect, you indicate that the State of Michigan will simply continue to seek more information and investigate the risks associated with operating Line 5 and the availability of various alternatives, ignoring the present duty to protect to act on behalf of the Great Lakes and the public trust.

Your letter maintains that the State of Michigan is "committed to protecting the Great Lakes from potential sources of pollution, including the Enbridge Straits Pipelines," and then outlines four specific actions primarily taken under the auspices of the two bodies created under executive orders – the Michigan Petroleum Pipeline Task Force and the Michigan Pipeline Safety Advisory Board. These actions serve only Enbridge and maintain the status quo of a prolonged investigative process that has not resulted in any specific precautionary measures taken by you and the State to reduce the risk Line 5 poses to the Great Lakes from a catastrophic oil spill.

Only one of the actions – notifying Enbridge of the need to install additional pipeline supports – actually is related to enforcing the State of Michigan's legal affirmative fiduciary responsibilities under the 1953 Easement with Enbridge that authorized these oil pipelines to occupy our public waters and bottomlands for 64 years now. Despite Enbridge's history of repeated span violations for decades¹, coupled with other compelling reports on risk, the State of Michigan has delayed enforcing the express terms of the 1953 Easement with Enbridge or even imposing rational precautionary measures on this hazardous oil pipeline.

¹ For a full history of Enbridge's chronic pipeline anchor failures, see FLOW's August 24, 2016, letter to the MDEQ and U.S. Army Corps of Engineers <http://flowforwater.org/wp-content/uploads/2016/08/FLOW-8-24-16-Final-Letter-to-DEQ-USCOE-Joint-App-Enbridge-for-Supports-GLSLA-CWA.pdf>. See also Dr. Timm's Technical Report titled: An Investigation into the Effect of Near Bottom Currents on the Structural Stability of Enbridge Line 5 in the Straits. <http://blog.nwf.org/wp-content/blogs.dir/11/files/2017/03/2017-Edward-Timm-Currents-and-StressesReport.pdf>

In July 2014, the State of Michigan authorized stabilizing Line 5 anchor permits under its 1955 public law known as the Great Lakes Submerged Lands Act (GLSLA), but demanded no comprehensive review of the purpose of the supports, (including an 80-percent increase in capacity from 300,000 barrels (bbls.)/day to 540,000 bbls./day), the potential or likely impacts, and alternatives to the underwater pipeline. In the fall of 2016, the State and MDEQ again authorized four more anchor supports, as required by the 1953 Easement, but without questioning the purpose or demanding an environmental assessment and determination of alternatives to the pipeline or crude oil transport in the Mackinac Straits. In fact, Enbridge applied for another 18 anchor supports at the time that it applied for the 4 supports, but the State and MDEQ let Enbridge withdraw its application for the 18 supports, even though the total of 22 anchor supports (the four plus 18) are inextricably related to the larger expanded capacity of crude oil transport through Line 5. The state had a legal basis and opportunity under the GLSLA and its administrative rules to require an environmental impact assessment and alternatives showing on the part of Enbridge, but looked the other way, forgoing the opportunity to assess the vulnerable areas identified in various documents that are subject to possible washouts on the lakebed floor.

Employing a “Trust Us” Approach, Enbridge Continues to Dictate the Terms of the Easement and Avoid Rule of Law Designed to Protect Public Trust Resources of the Great Lakes

As you are aware, Enbridge’s own September 2016 biota investigation work plan², submitted to the U.S. Environmental Protection Agency (EPA) as part of the Line 6B proposed Consent Decree, reveals 19 specific locations of missing protective pipeline coatings or “holidays”³ in the Straits. These coatings are critically important to preventing corrosion and are required to be well maintained by Enbridge’s 1953 Easement. Enbridge, however, disputes its own report and maintains that this work plan is merely “hypothetical.”⁴

In addition, independent expert reports and videos from Dr. Ed Timm also raise fundamental questions about the integrity of these aging underwater oil pipelines. Dr. Timm’s Appendix 2 describes the function of the pipeline coating as well as the wooden slats:

Based on this document and Figure 2, which shows the pipe wrapping machine loaded with four rolls of similar, presumably asphalt saturated glass fiber fabric, it is probable that Line 5’s coating system consists of a solvent based asphalt primer, two layers of asphalt saturated glass fiber fabric and a white protective overlayer of white craft paper bonded with asphalt enamel. The craft paper layer was intended

² Enbridge Line 5 Straits of Mackinac, Biota Investigation Work Plan (Submitted September 27, 2016) <https://www.scribd.com/document/339434109/Line-5-Biota-Investigation-Work-Plan#>

³ ANSI/NACE “Standard Practice: Pipeline External Corrosion Direct Assessment Methodology,” Revised 6-24-210, Definition section defines Holiday as a “discontinuity in a protective coating that exposes unprotected surfaces to the environment.” https://www.nace.org/uploadedFiles/Corrosion_Central/Industries/SP050208PHMSA.pdf

⁴ Keith Matheny, “Enbridge denies own report noting Straits oil pipeline losing coating,” Detroit Free Press, Feb. 16, 2017 <http://www.freep.com/story/news/local/michigan/2017/02/16/enbridge-denies-own-report-noting-straits-oil-pipeline-losing-coating/98004652/>

to provide some abrasion protection to the underlayers and protect the wrapped pipe from the heat of the sun as described in reference 6. In addition to these layers, the pipe was intended to be wrapped with 1' x 4" wooden slats held on by encircling bands. A hint regarding the purpose of this wooden lagging can be found in Salvadori's report during a discussion of miscellaneous stresses on the pipe. It is believed that the purpose of these slats was to protect the coating from abrasion due to scrubbing on the lake bottom and to protect the pipe from point loading.⁵

This new evidence concerning the condition of Line 5's pipeline coating is very significant because delamination and missing coatings were contributing factors in the notorious Enbridge Line 6A and 6B pipeline ruptures. In both pipeline accident reports, the National Transportation Safety Board (NTSB) cited pipeline delamination and missing coatings in the vicinity of the leak location. The NTSB report described the oil pipeline tape coating of Line 6A in Romeroville, IL as being "heavily damaged in the area above the water pipe, likely from the water jetting against it. Strips of ripped and disbonded coating and tape hung down from the sides of the pipeline in the vicinity of the leak location (Figure 3. View of the damaged tape coating on the oil pipeline in the excavated trench)."⁶ As for Line 6B, the NTSB report explained that: "The loss of the bond [the adhesion] between a pipeline and its protective coating commonly is called disbondment, which has been known to allow moisture to become trapped between the surface of the pipe and the tape, creating an environment that may be corrosive." The report further noted that "[b]ecause the tape had become disbonded, the pipeline's cathodic protection was prevented from reaching the pipe; it no longer prevented corrosion from occurring."⁷ In addition, [e]xternal corrosion was observed along the length of the pipe in areas where the coating had disbonded."⁸ While the pipeline coating of Line 6A and 6B are different than Line 5's, it is noteworthy that the company reported to NTSB that: "this type of external tape coating and its typical degradation mode are key factors in determining the pipeline's potential susceptibility to SCC (stress, corrosion, cracking)."⁹

In response to Line 5's troubling structural pipeline evidence, your letter indicated that you provided the available information to contractors evaluating the pipeline's risk and alternatives, invited Enbridge to make a formal presentation to the Michigan Pipeline Safety Advisory Board on March 13, 2017, and made a detailed information request.

Just last week, Enbridge provided a confusing presentation to the Advisory Board and the public to explain what these "holidays" meant in its own federal technical report. Enbridge's Director of Pipeline Integrity, Kurt Baraniecki, argued that the pipeline was in "as good of condition as the day it was installed." Baraniecki denied that there were coating "holidays," or exposed pipe metal spots on the line and that underwater inspections last summer only showed areas with lost outer wrap coating. "The outer

⁵ See also Dr. Timm's Technical Report: An Investigation into the Effect of Near Bottom Currents on the Structural Stability of Enbridge Line 5 in the Straits. <http://blog.nwf.org/wp-content/blogs.dir/11/files/2017/03/2017-Edward-Timm-Currents-and-StressesReport.pdf>

⁶ National Transportation Safety Board, Pipeline Accident Brief, NTSB-PAB 13/03, p. 8 <https://www.nts.gov/investigations/AccidentReports/Reports/PAB1303.pdf>

⁷ National Transportation Safety Board, Pipeline Accident Report NTSB/PAR 12/01, "Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release Marshall, Michigan July 25, 2010," p. 24 <https://www.nts.gov/investigations/AccidentReports/Reports/PAR1201.pdf>

⁸ Id.

⁹ Id. at 32.

wrap is not something we'd typically repair." He then explained how a contractor accidentally "generalized" language in a federal work plan that [showed numerous defective spots](#) in the pipeline's protective coating. The conclusion from Enbridge's presentation is this: while no bare metal is exposed in the Straits, the outer coating layer has and is failing in several locations but Enbridge does not typically fix this type of protection system.

A number of Pipeline Safety Advisory Board members raised serious questions about Enbridge's contorted explanation. Michigan State Police Captain Chris Kelenske, the state's emergency management coordinator, questioned Enbridge's position that it didn't plan to repair the outer coating because, "from where I sit, any percent above zero is not good."¹⁰ Mike Shriberg, regional director for the National Wildlife Federation, said he had a hard time squaring Baraniecki's assertion that the line was as good as new when there is delamination in the outer wrap.¹¹ And Jennifer McKay, policy director for Tip of the Mitt Watershed Council, stated after the meeting that, "Enbridge needs to do a full analysis on the coating and look at the outer wrap, inner wrap, coal tar enamel and determine what is the extent of loss and what does it ultimately mean for the fitness of service for this pipeline."¹²

Despite this presentation on the outer pipeline delamination, Enbridge has failed to answer the fundamental question: ***If areas along Line 5 lack this easement-required outer pipeline coating, how does it affect the structural integrity of the pipeline?*** We still do not know.

What we do know is that Enbridge's current pipeline assessment technology – inline inspection (ILI) tool – failed to detect external pipeline coating and corrosion problems, and that the delaminated areas were discovered by visual inspection in 2014 and 2016. The extent of the pipeline delamination, however, remains unknown because of the thick invasive mussel growth on the dual pipelines and inaccessibility where the pipes lie on the public bottomlands. In short, this 64-year-old underwater oil pipeline has a compromised coating, is likely to have fatigued metal from insufficient supports and powerful underwater currents, and cannot be inspected externally by remote operator vehicle (ROV) due to thick, encrusted invasive and acidic mussel growth and portions lying on the bottom.

In sum, Enbridge's actions to discount and withhold critical information essential to evaluating the risks of continued operation violate the Easement's reasonable and prudent person standard to prevent unacceptable harm to public property, private property, and public health and safety. Given the gravity of the pipeline's compromised structural integrity, the State of Michigan must bring enforcement action against Enbridge under the express terms and conditions of the 1953 Easement. By bringing Enbridge under rule of law, the state then can demand real answers to important questions, including how Enbridge will detect missing coating on the bottom of the pipeline since section 3.3.3.1 of the Biota investigation states that "samples will not be collected from the bottom of the pipeline if it is not accessible due to safety hazards or because the bottom is in contact with the lake bed."

¹⁰ Garret Ellison, "Outer wrap coating has failed on parts of Line 5, Enbridge confirms," MLive, March 14, 2017 http://www.mlive.com/news/index.ssf/2017/03/enbridge_line_5_delamination.html

¹¹ Id.

¹² Id.

Conclusion

It is not enough to stand on the sidelines or fail to take action that has the effect of complicity by deferring to Enbridge, such as the failure to assert regulatory authority during last fall's GLSLA process, and merely request additional information from Enbridge given the high risk of a catastrophic oil spill in the Great Lakes that would devastate our public drinking waters and our water-dependent economy.

Because of the solemn and perpetual nature of the state trustee duty to protect the paramount interests of public water resources, the State must not only act to prevent endangerment of the trust, but it must also take affirmative steps to protect the trust. The State's deliberate decision to conduct three years of ongoing, endless investigation with no deadline in sight is not acceptable.

For nearly two years, we have heard our state leaders declare that the days of this pipeline are numbered and that Line 5 wouldn't be built today. However, the State of Michigan has not taken a single preventative measure to make our Great Lakes safer from a catastrophic oil spill. Instead, the state has authorized permits that allow an 80-percent increase in Line 5's daily oil volume without any review of environmental risks or alternatives, and continues to allow use of the line for crude oil transport despite inadequate lakebed supports, missing coating and slats, a deficient emergency spill response plan, and a wholly inadequate insurance liability of a \$1 million – just to name a few key issues.

The larger question remains: When will the State of Michigan, and you as trustees of the public trust in the Great Lakes, take on the necessary leadership to exercise the prudence and precaution required by the 1953 Easement and the public trust to prevent the unthinkable: a catastrophic oil spill that would destroy the Great Lakes, our drinking water, our fishery, tourism, riparian and public property, our economy, and our very way of life.

Sincerely,

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