



Protecting the Common Waters of the Great Lakes Basin
Through Public Trust Solutions

**A SCIENTIFIC AND LEGAL POLICY REPORT ON THE TRANSPORT
OF OIL IN THE GREAT LAKES:**

**(1) RECOMMENDED IMMEDIATE ACTIONS ON THE TRANSPORT
OF OIL THROUGH LINE 5 UNDER THE STRAITS OF MACKINAC;
AND**

**(2) SUPPLEMENTAL COMMENTS ON THE MICHIGAN PETROLEUM
PIPELINE TASK FORCE REPORT**

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OVERVIEW

The Michigan Petroleum Pipeline Task Force, co-chaired by Attorney General William Schuette and Michigan Department of Environmental Quality Director Dan Wyant, issued its Michigan Petroleum Pipeline Task Force Report on July 14, 2015. The Task Force Report sets forth a summary of findings, specific recommendations to address the transport of oil in Enbridge Line 5 under the Straits of Mackinac, and general recommendations to address petroleum pipeline siting, environmental, health, and safety issues in Michigan. The Task Force Report advances a number of significant recommended actions that, if implemented properly, could address a number of short-term imminent harm or substantial endangerment to air, water, natural resources, and the public trust in these paramount resources, public and private property, and the public health and safety of Michigan.

For Love of Water (“FLOW”) reconvened its scientific and technical advisory team and legal policy team to evaluate the Task Force Report and the available public record underlying the Task Force’s review, and to provide additional scientific, engineering, policy and legal research and recommendations.¹

Based on a careful review of the Task Force Report, FLOW submits this follow up report for the following purposes:

- (1) FLOW concludes that the current use of Line 5 for the transport of crude oil poses a high level of risk and imminent high magnitude of harm, and proposes a specific action plan with prudent interim measures to immediately lower the risk and eliminate this imminent harm.
- (2) FLOW provides supplemental comments on certain findings in the Task Force Report and offers a number of additional recommendations.

The Task Force and its leaders should be commended for the level of their review, evaluation, and recommendations. However, the Task Force did not recommend any action plan or specific interim measures, or establish implementation of studies for additional findings, with the exception of the establishment of the Pipeline Safety Advisory Board through the Governor’s Executive Order, 2015-12.² While the Executive Order establishes a board of advisors with a charge to review and advise state agencies regarding the recommendations of the Task Force, it does not specify, authorize, or implement any action plan to address the high level of risk and magnitude of harm threatened by the continued transport of crude oil through Line 5 in the Straits of Mackinac.

¹ FLOW’s scientific and technical advisors to this report are Richard J. Kane, QEP, CHMM, CPP; Gary L. Street, P.E., formerly Director of Engineering, Dow Environmental (Eastern Operations); and Edward E. Timm, P.E., Ph.D., Technology Director, Film Tec Corporation, subsidiary of Dow Chemical, (for a more complete description of qualifications; see paragraph 2., p. 7, Olson, J., and Kirkwood, E., FLOW *Composite Summary of Expert Comments, Findings and Opinions on Enbridge Line 5*, submitted to Michigan Petroleum Pipeline Task Force, on April 30, 2015 Hereinafter “FLOW Composite Report”).

² Michigan Petroleum Pipeline Task Force Report (hereinafter “Task Force Report”), pp. 43-47.

Because of the high level of risk and serious harm associated with the transport of oil in Line 5 under the Straits of Mackinac,³ there are several interim measures that should be taken as expeditiously as possible to lower the risk of unacceptable harm. In addition, we urge the Attorney General, Department of Environmental Quality (“DEQ”), and Department of Natural Resources (“DNR”) to take a number of steps to implement these actions and enforce legal obligations concerning Line 5 that can assist in reducing and eventually removing the risk of unacceptable harms, which all interests appear to acknowledge, associated with crude oil transport in Line 5 under the Straits of Mackinac.

There are alternative pipeline routes and capacities to transport crude oil to Sarnia or other points in Canada and the U.S. Line 5, for example, primarily transports crude oil to Canada, and is not essential for Michigan refineries, which are served by pipelines across southern Michigan and elsewhere.⁴ Natural gas liquids for propane, which are also transported in Line 5, would continue to be transported through Line 5 to its transfer point in the Upper Peninsula or locations in the Lower Peninsula.⁵

Finally, there are a number of supplemental findings and recommendations that may be helpful, if not essential, to the State’s officials and departments, as trustees of the Great Lakes, to protect the Straits and other navigable waters of Michigan, including related aquatic resources and ecosystems, and the public and private uses that depend on them.

FLOW EXECUTIVE SUMMARY

PART 1: PROPOSED ACTION PLAN, INTERIM MEASURES, AND ENFORCEMENT FOR LINE 5, AND SUPPLEMENTAL FINDINGS AND COMMENTS TO THE TASK FORCE REPORT

a. Straits pipelines are an imminent hazard and substantial endangerment given the consequences and magnitude of harm, not probability.

An “imminent hazard” or “substantial endangerment” of high magnitude of harm for transporting hazardous materials, like crude oil, is defined by statute “as the existence of a condition relating of hazardous material that presents a substantial likelihood that death, serious illness, severe personal injury, or a substantial endangerment to health, property, or the environment may occur before the reasonably foreseeable completion date of a formal proceeding begun to risk of that death, illness, injury, or endangerment.”⁶ Notably, this definition of “imminent” emphasizes the

³ Id; FLOW Composite Report, April 30, 2015; and see selected pages from the attached Appendix 4, Presentation August 4, 2015, Charlevoix Public Library, by Ed E. Timm, Ph.D. FLOW’s science and technical advisors’ new or additional findings are set forth below in Part I, 1. subparagraphs a. through o., and attached Appendices 1, 2A, 2B, 2C, 2D, 3, selected pages, Appendices 4 and 5.

⁴ Attached Appendix 1, Gary Street, pp. 3-4, Street Appendices 1-6.

⁵ See Part II 1, A, *infra*.

⁶ 49 USC § 5102 (Title 49, Transportation, Subtitle III, Chpt. 51).

seriousness or magnitude of the harm, injury, or endangerment from a hazard, *not* the probability of the occurrence. In the leading court decision on “imminent” hazard risk of harm or “endangerment,” the court ruled that the central question for government to evaluate when evaluating “imminent” injury and facing uncertainty of devastating harm was the magnitude of harm, not the probability of occurrence. In other words, government does not have to wait for a catastrophe or harm to occur, but can act to prevent it.⁷

b. Coupled with the Task Force Report findings, new additional risks and concerns establish imminent harm, unacceptable high-level risk, and catastrophic damage to the Great Lakes.

FLOW’s science and technical advisors have identified several additional risks and concerns that are not covered by the Task Force Report, but which must be considered along with the findings of the Task Force Report. These additional findings and concerns, coupled with the findings of the Task Force Report, demonstrate a very high level of risk sufficient to establish imminent harm or substantial endangerment of the Straits waters and related natural resources, public and private property, and public health and safety. These additional findings include recognition by Enbridge’s own mass balancing measuring system that as much as 3,350 barrels of crude oil per day are not accounted for or considered detectable. Enbridge unilaterally decided, without independent state agency review as to purpose and integrity, to reduce the number of required structural supports or anchors of the pipeline. Enbridge reported there have been no dents in Line 5 under the Straits, when the public record discloses “two minor dents.” Once tar or other pipeline coating is compromised or dented, mussels can attack the steel pipeline more readily. It also appears that the pipeline in some instances is operating under over-pressurized conditions for its design and use for transporting crude oil.

c. Impose immediate interim measures to reduce the high-level risk from “Tier 1” to a lower risk tier pending implementation of the actions required from the Task Force Report.

Pending completion of a specific action plan, interim measures must be imposed as soon as possible to lower this high-level risk and eliminate the high unacceptable magnitude of harm to the Great Lakes and the Straits of Mackinac. These interim measures include additional and more frequent monitoring and inspections, an emergency response plan with effective local capacity, and the temporary cessation of transporting crude oil

⁷ Ethyl v. EPA, 541 Fed 2d 1 (D.C. 1976); See also Reserve Mining v. EPA, 514 Fed 2d 492, 519-520 (8th Cir. 1975).

through Line 5 under the Straits.⁸ Based on current servicing of demand, these interim measures would not adversely impact the transport of natural gas liquids (“NGLs”) to supply propane to the Upper Peninsula or other Michigan businesses and residents.

d. Implement the following specific actions to reduce the level of risk, mitigate harm, and finally address the fate and removal of transporting crude oil in Line 5 under the Straits.

- (1) Convene and immediately complete the Task Force Report specific recommendation for an independent expert alternatives assessment regarding transport of crude oil in Line 5 through the Straits segment;
- (2) Convene and immediately complete the Task Force Report specific recommendation for an independent risk analysis and credible release and worst-case scenarios;⁹
- (3) Implement immediate adequate financial assurances and an approved emergency response plan by independent qualified experts that conform to the level of risk and credible release and worst-case scenarios;
- (4) Require immediate submission of additional verifiable information from Enbridge and other qualified and independent sources to assure that information is full and complete for rendering evaluations, making final decisions, and taking actions regarding transport of oil in Line 5.
- (5) Take immediate enforcement actions against Enbridge to address any material violations of the 1953 Easement.
- (6) Exercise the full authority under our constitution and laws, including common law, that eliminate or prevent the high risk and magnitude of harm from a rupture, leak, or other failure of Line 5 under the Straits.

PART II: SUPPLEMENTAL FINDINGS AND COMMENTS ON THE TASK FORCE REPORT THAT ADDRESS THE HIGH-LEVEL RISK OF LINE 5 UNDER THE STRAITS AND GREAT LAKES, AND THE PUBLIC TRUST IN THESE TREASURED WATER RESOURCES OF THE STATE.

- a. The proper context for evaluating petroleum pipelines is Michigan’s constitutionally required paramount concern for the protection of health and safety and the air, water, natural resources, and public trust Great Lakes waters and the State’s lakes and streams.**

⁸ Attached Appendix 3, Rick. Kane, Technical Advisory Team Immediate Implementation and Action Plan for Enbridge Line 5, pp. 3-4, Appendix. 3-B.

⁹ Id.

While crude and refined oil are important to the overall economy in the United States, the fundamental background or “setting” for addressing pipelines in Michigan is the State’s highly valued Straits, Great Lakes, lakes and streams, and environment.¹⁰ The unacceptable harms to Michigan’s economy from the impact of an oil spill in the Great Lakes on public drinking water supplies, business viability, fishing, shipping, boating, tourism, and recreation far outweigh the significantly smaller impact, if any, on the oil industry if oil is not transported in pipelines under or in these highly valued waters. There are alternative pipeline routes and capacities to transport crude oil to Sarnia or other points in Canada and the U.S. Line 5, for example, primarily transports crude oil to Canada, and is not essential for Michigan refineries, which are served by pipelines across southern Michigan and elsewhere.¹¹ Natural gas liquids for propane, which is also transported in Line 5, would continue to be transported through Line 5 to its transfer point in the Upper Peninsula or locations in the Lower Peninsula.¹²

b. New, additional findings and concerns from available public information establish that transport of crude oil in, under, or on the Great Lakes presents a serious high-level risk that should be eliminated.¹³

The lack of sufficient structural supports and wooden slat covers to protect Line 5 under the Straits exposes the pipeline to currents, abrasion, and other failures. Moreover, Enbridge has never been required to do, and has never done, a competent emergency response plan based on a full and worst-case scenario of a rupture or release of crude oil in the Straits. In the event of a catastrophic spill in the open waters of the Great Lakes, there is insufficient capacity in place at the local level, and winter conditions would challenge any adequate cleanup response. Further, inherent detection limits are not designed to detect a leak from one of the lines of up to 70,000 gallons of oil per day (140,000 gallons per day, if both lines leak). Standard corrosive data in the industry shows significant thinning of aging pipelines like Line 5, which coupled with the weight of mussels and increased volume capacity from 300,000 to 500,000 gallons per day create a substantial risk of failure.

c. Michigan’s legal and regulatory framework has not been fully identified or utilized by state agencies or officials.¹⁴

Regulatory tools of the Michigan Public Service Commission (“MPSC”), the DEQ, and DNR include environmental impact statements and alternative analyses, along with water and public trust protections on routing, siting, or

¹⁰ Part II, *supra*, p 19.

¹¹ Attached Appendix 1, Gary Street, pp. 3-4, Street Appendices 1-6.

¹² *Id.* Because of its volatile explosive nature, NGL pipeline releases pose primarily an endangerment to public health and safety. While serious in nature, NGL ruptures present a different harm analysis than the high level risk and magnitude of harm associated with release of oil from Line 5 in the Straits.

¹³ See the additional risks described in Part I, *supra*, 1. a. through o.

¹⁴ See Part II, 2,b.

additions and expansion of existing or future pipelines. These legal requirements have either been largely ignored or limited in scope to segments, rather than the entire pipeline and impacts and alternatives as a whole. As a result, opportunity for public review of existing lines and their locational risks, such as in the Great Lakes or near increasingly-populated areas, has been lost. For example, substantial changes and additions were made to Line 5 with little or no MPSC oversight and no environmental impact or alternatives analysis; if the Michigan Environmental Protection Act (“MEPA”) had been fully utilized, the MPSC could have reevaluated Line 5 on various occasions. Likewise, since the catastrophic Kalamazoo River spill from Enbridge’s Line 6B, the MPSC had several opportunities to address impacts or alternatives from the significant changes or additions to the pipeline, as well as related issues like future capacity and crude oil transport purposes in Michigan to Canada or elsewhere. However, the MPSC waived or did not assert the authority to do so.

d. Michigan Inland Lakes and Streams (“ILSA”), Part 301, NREPA, and Great Lakes Submerged Lands Act (“GLSLA”), Part 325, were not identified as part of the legal and regulatory framework.

The GLSLA and ILSA protect the water resources and public trust in Michigan and Great Lakes waters.¹⁵ These laws specifically require environmental assessments and alternative studies before authorization or permits are approved for crossing or using Michigan water bodies. These laws were not identified by the Task Force as part of the framework to address pipeline siting, routing, impacts, and alternatives in Michigan. These laws and their regulations offer significant opportunities for review of existing oil pipelines that cross or run under our public waters.

e. The Michigan Environmental Protection Act (“MEPA”), Part 17, NREPA, offers an important overarching framework and body of environmental common law that supplements agency laws and regulations.

The MEPA or Part 17 imposes a duty and grants authority to state agencies to consider and determine likely environmental effects and alternatives, either in review of existing or new pipelines. Part 17 also provides a basis for taking affirmative action to prohibit likely unacceptable harms or imminent risks to our air, water, natural resources, or recognized public trust in water or natural resources. Part 17 should be added as a regulatory principle and tool to the Task Force Report.

¹⁵ Id.

FLOW REPORT

PART I

SPECIFIC COMMENTS AND IMMEDIATE ACTIONS TO ADDRESS SERIOUSLY HIGH AND UNACCEPTABLE RISKS AND IMMINENT HARMS OR SUBSTANTIAL ENDANGERMENT TO THE STRAITS FROM THE TRANSPORT OF CRUDE OIL IN LINE 5

In addition to specific covenants and conditions, Enbridge has a legal and covenantal duty under the 1953 Easement “at all times...to exercise the due care of a *reasonably prudent person* for the safety and welfare of all persons and of all public and private property.” The unreasonable risk and high or catastrophic level of imminent harm violate this “reasonably prudent person” standard under the terms of the Easement. The high risk and imminent harm from shipping oil through Line 5 under the Straits also violate the continuing and supervisory duty imposed by the public trust doctrine and environmental laws that apply to the Great Lakes. The public trust in these waters and environmental standards require the State of Michigan and Enbridge to take immediate action to prevent and minimize harm to the air, water, natural resources, and public trust in those resources.¹⁶ The State has both the legal authority and affirmative duty to protect these waters and uses. In short, the transport of oil through Line 5 presents an imminent risk or endangerment of an unacceptable level of harm and destruction that is irreparable – that is, the harm if a release occurs will be pervasive, in large degree irreparable or irreversible, and persistent.

1. Additional Concerns and Risks Compound the Immanency and High, Unreasonable, and Unacceptable Risk of Harm of Transporting Oil through Line 5.

The transport of oil in Line 5 under the Straits of Mackinac and in the Great Lakes presents an imminent unacceptable risk of harm and endangerment, and is categorized as a “Tier 1” risk¹⁷ to public and private property, water, water resources, the public trust, and the public health and safety, and welfare of persons, businesses, and communities.

a. The spill, release, accident, and harm history of Enbridge oil pipelines has increased from 40 per year in 2001 to 115 per year in 2015.

¹⁶ Ray v. Mason County Drain Comm’r., 393 Mich 294, 224 NW2d 883 (1975). The protected public uses, such as navigation, drinking water, fishing, boating, swimming, water-dependent recreation and businesses, are by law paramount and cannot be subordinated. Obrecht v. National Gypsum Co., 361 Mich 399, 412, 415-416, 105 NW2d 143, 149-151 (1960); Illinois Central R. R. v. Illinois, 146 US 387, 436, 437, 453-459 (1892).

¹⁷ Line 5 is categorized as a high level “Tier 1” risk and constitutes a substantial and imminent harm or endangerment. Appendix 3, R. Kane, supra, pp. 2-3. As noted above, the definition of “imminent” risk of harm for transporting hazardous materials, like crude oil, is defined as “the existence of a condition relating to a hazardous material that presents a substantial likelihood that death, serious illness, severe personal injury, or a substantial endangerment to health, property, or the environment...” 49 USC § 5102 (Title 49, Transportation, Subtitle III, Chpt. 51).

The increased number of reported accidents and releases elevates the Enbridge Line 5 pipeline, including the Straits segment, toward the top of the “environmental disaster” pyramid.¹⁸

b. The “worst-case” scenario of Enbridge is understated, unrealistic, and inconsistent.

Enbridge has made inconsistent statements over its representation of a “worst-case” scenario. In one statement Enbridge reported that a release from two lines would release 8,583 barrels; in another statement Enbridge reported the “worst-case” for a single pipeline release would be 4,950, and from two lines 9,900 barrels. In any event, Enbridge’s representation of its “worst-case” is not credible; a worst-case scenario involves full loss of hazardous substance or liquid, failed detection and/or shut-in technology, or in lack of emergency response capacity.¹⁹ Full disclosure and analysis of a catastrophic/low probability event is required for considering impacts, alternatives, and critical to establishing valid emergency response plans.²⁰ Enbridge has either not completed this or has not disclosed its internal worst-case scenario. Moreover, its emergency response plan is flawed because it did not apply a valid or credible worst-case analysis and disclosure.²¹

c. Line 5 under the Straits was not designed or intended for additional weight from mussels.

Mussels, pipeline changes, increases in volume, and other factors were not accounted for in its original design standards. This new factor has compromised the safety and stability of the pipeline.²² These pipelines were not designed for the added weight or acidity of invasive species currently present on the pipelines or prevalent in the Great Lakes. If coupled with increased volume of oil by as much as 80%, safety factors are compromised.²³

¹⁸ Appendix 1, Appendices 1-1 and 1- 2, pp. 6-7.

¹⁹ *Id.*, p. 3. Actually, Enbridge’s “worst-case” scenarios are not credible and not based on standard “worst-case” principles. Moreover, this is not a credible worst case, but rather closer to a “best case” scenario. A worst-case scenario would involve long slower release with a failure of detection and total loss of product with a long response time. Another would involve a major rupture with failed “shut-in” valve and long response time or lack of response capacity. For a definition and application of “worst case,” see CEQ guidelines, 40 C.F.R. §1502.022, and *Sierra Club v. Sigler*, 695 F.2d.957, 969-975 (5th Cir. 1983); CWA “Worst-case discharge.” 33 U.S.C. § 1321(a)(24)) for offshore facilities including pipelines.

²⁰ *Sierra Club v. Sigler* at 972.

²¹ See “30-Day Notice of Intent to Sue,” Letter from Attorney Neil Kagan, National Wildlife Federation, to Secretary, U.S. Department of Transportation, July 28, 2015, pp. 9-11. It should be noted that Enbridge intends to test its emergency response readiness via its Emergency Response Team (E3RT) on September 24, 2015. This is an exercise in response to a Best-Case Scenario, not a worst case response plan exercise as demanded by industry standards.

²² Appendix 1, Appendices 1-1 and 1-2, p.3.

²³ *Id.*

- d. **Enbridge mass balance inaccuracy could lead to an undetected release of as much as 140,700 gallons of oil per day.**

Enbridge uses mass balance measuring to make sure the amount of crude arriving at Mackinaw City is the same amount that went into the pipeline at St. Ignace. However they state that due to the inherent inaccuracy of the measurement, 3,350 barrels per day (140,700 gallons per day) could be “unaccounted for.” Thus, the “unaccounted for” quantity may have leaked into the Straits and not detected by the mass balance.

- e. **Federal and State agencies cannot adequately respond to a spill, especially in the winter.**

US Coast Guard commandant Admiral Paul Zukunft is “not comfortable” with contingency plans for a worst-case scenario in the Great Lakes,²⁴ and DEQ oil spill chief Robert Wagner has stated that “if the Straits are frozen over, cleanup would be far more challenging.”²⁵ Dr. Amy McFadden, NOAA, pointed out that responders can recover oil for a few days, but parts that sink into the water column are “practically impossible” to recover.²⁶ In addition, Steven Keck of the U.S. Coast Guard said that they “wouldn’t put people on the water at night or in waves over three feet” in either a training or an actual spill scenario regardless of the season.²⁷

- f. **The number of supports/anchors for Line 5 required by the Easement has been violated, the current number is insufficient, and authorization has not involved complete review or the proper amendment of the Easement.**

Enbridge has admitted that it has not installed calculated support for the original 300,000 barrels per day (“bbls/day”) construction design, and did little to comply with the Easement. Enbridge unilaterally increased oil flow to 540,000 bbls/day. The 1953 Easement requires support every 75 feet for 300,000 bbls/day, but Enbridge has installed only 140 supports today, with most installed between 2014 and 2015.²⁸ To comply with the Easement, many additional supports are needed. There has been no reported calculation for the effects of the possible 27% added weight from mussel biomass and/or the increased flow of 200,000 bbls/day. These changes have not been fully approved through proper amendment to the Easement or by state agencies; rather these changes appear to have been determined unilaterally by Enbridge. Moreover, the State DEQ has not yet fully evaluated the risks to the public

²⁴ Id., p. 4, Appendix 1-9.

²⁵ Id., p. 4, Appendix 1-8.

²⁶ Dr. Amy McFadden, NOAA, <http://response.restoration.noaa.gov/about/media/five-key-questions-noa-scientists-ask-during-oil-spills.html>

²⁷ Tip of the Mitt Pipeline Workshop, Petoskey, Michigan, August 27, 2015.

²⁸ Id., p. 4; emails on file in FLOW offices (available on request).

trust, water, uses, or the alternatives to Line 5 regarding these significant changes, violations of the Easement, and increases in volume of oil.

- g. Based on available data from Enbridge and other public sources, the pump station discharge pressure limits set by MPSC orders for the existing 12 pump stations exceed values compliant with ASME standards.**

These MPSC orders document the evolution of Line 5 from an initial design capacity of 120,000 bbls/d with no pump stations in Michigan, to a capacity of 300,000 bbls/d with four pump stations in Michigan, to a capacity of 565,000 bbls/d²⁹ with 19 pump stations in Michigan, and currently to a capacity of 540,000 bbls/d with 12 pump stations in Michigan. As these changes were implemented over a 60-year period, the MPSC set discharge pressure limits based on the varying wall thickness of the pipe downstream of each pump station. By agreement with Enbridge, these pressure limits were set at 65% of system yield pressure as calculated according to the American Society of Mechanical Engineers (“ASME”) B31.4, using the as-new wall thickness of each pipe section as an input.³⁰ ASME B31.4 allows operation at 72% of system yield pressure so it can be said that Enbridge has chosen a lower value (by seven %) as a safety allowance for corrosion and other unforeseen factors. Based on available data for the rates of wall thinning by both internal and external corrosion and erosion, it is probable that the seven % safety allowance accepted by the MPSC in the past without considering age-related wall thinning is no longer adequate to assure compliance with ASME B31.4 or to assure safety.³¹ Additionally, the encroachment of development on the Line 5 right-of-way over the past 60 years raises questions about whether more stringent safety factors than previously used by Enbridge and the MPSC in determining safe operating pressures for the 12 segments of Line 5 should be applied.³²

- h. There have been significant changes in the number and locations of pump stations, volumes of oil and pressure, and/or crude oil product that create substantial risks of non-compliance with pressure limits or other standards.**

A review of available public records of the Michigan Public Service Commission (“MPSC”) show a range of four to 19 pump stations for handling oil and other products in Line 5. Currently 12 pump stations serve Line 5; in addition, a number of anti-friction agents and stations have been changed in an effort to reduce pressure or erosion.³³ On the other hand, it appears some of these changes were made without public review or consideration of

²⁹ Appendix 2A, p. 1-2.

³⁰ Id., p. 2.

³¹ Id., p. 4.

³² Id., pp. 4-6.

³³ See Timm, E., Appendix 2A, pp. 1-2, Appendix. 2C, pp. 2-3; see paragraph I.(1)(i), *infra*.

intended purpose, risks, effects, or alternatives on the part of the MPSC. In one instance, the MPSC limited its review by not requiring an environmental impact assessment or statement on the cumulative impacts or alternatives from a change in the number and location of pump stations and other measures.³⁴

i. **Enbridge may well be operating beyond the original design calculations which increase the risk of failure.**

The original design for Line 5 was for 120,000 bbls/day but increased to 300,000 bbl./day when four pump stations were added later in 1953. Between 1953 and 1993, up to 19 pump stations existed or were noted. In 1987, MPSC issued order for up to 19 pump stations and discharge pressures.³⁵ Between 1953 and 1987, there does not appear to be a public record of the purpose, risks, or other considerations regarding these changes. In 2012, Enbridge disclosed to MPSC that it has 12 existing pump stations. During an undisclosed period, Enbridge added or moved injection equipment on its own, in order to inject friction-reduction agents. In June 2012, Enbridge notified MPSC of changes in injection facilities, and in 2014 notified MPSC that these changes had been completed.³⁶ No information is available on the impact to Line 5 pressure profiles or compliance with ASME piping codes, which creates uncertainty and further risk concerning Line 5. Use of drag or friction agents has been introduced without public record, except in 2012-2014, and without engineering calculations or compliance considerations. As a result, the operating condition of Line 5 cannot be determined, and it appears the MPSC allows Enbridge to operate significantly beyond the original design and calculations for siting Line 5 in Michigan; this, in turn, presents a greater risk of rupture or failure of Line 5, including the Straits segment, than considered when originally designed and constructed in 1952-1953.³⁷

j. **In addition to violation of its Easement conditions regarding support/anchors, Enbridge is in violation of the additional requirement for installation of wooden slats to protect the coating and increase support for Line 5 under the Straits.**

Paragraphs (8), (9), and (10) of the 1953 Easement require cathodic protection of the pipeline from deterioration, specific pipeline coating materials, and interval supports for the pipeline resting on the gravel bed. Specifically, “(9) all pipe shall be protected by ... one inch by four inch (1”x4”) slats prior to installation.”³⁸ Slats covering and protection were necessary because large sections of Line 5 rest on gravel beds on the floor of the Straits. The layer of

³⁴ Id., p. 4.

³⁵ Appendix. 2A, pp. 1-2; Appendix 2C, pp. 1-2.

³⁶ Appendix 2C, pp. 2-3.

³⁷ The potential greater risk of exceeding ASME operating pressure increases the probability pipeline failure or rupture; Appendix 2C, p. 4.

³⁸ Appendix 2B, p. 1.

slats surrounding the entire submerged pipeline was needed to protect the bottom of the pipeline and to prevent abrasion of the coating material. Otherwise motions from temperature gradients, currents, and internal pressure changes would cause coating failure from mechanical abrasion.³⁹ Moreover, while Enbridge has been adding support structures, it has not used grout bags very often to stabilize the pipeline, and the number of structures remains in violation of the 75-foot spacing numbers required by the Easement.⁴⁰ Based on the record submitted by Enbridge to the Task Force, over 50 percent of unburied sections of the Straits pipelines rest directly on what remains of the bed prepared in 1953, and these sections lack the required corrosion and abrasion protection from the slats required by the Easement.⁴¹ As a result, there is a greater risk of pipeline failure from dents, abrasion, coating loss, or corrosion under the Straits.

k. Enbridge inspection technology and response methodology is inadequate.

All aging pipelines are structurally degraded as a result of fluid-friction, erosion, corrosion, cracking, or mechanical damage and operation. Industry addresses this degradation through a combination of inspection technologies and modeling. Since most pipelines are buried and/or coated with protective or other substances, external inspection is often impractical. The data is often plotted on “unity charts” to determine if there are undesirable readings or measurements.⁴² Under-measured points show a risk of degraded conditions that could result in pipeline rupture. Critical flaws or problems must be identified and lines promptly repaired, replaced, or shut down to avoid undetected failures or ruptures.⁴³ It appears that Enbridge set measurement or threshold levels to trigger repairs or other prompt action on its Line 6B too high;⁴⁴ the practice in connection with Line 5 has not been documented.

l. While Enbridge stated there has never been any damage to Line, in fact Enbridge has reported dents in Line 5.

Enbridge reported two dents noted by its contractor who inspected the pipelines under the Straits.⁴⁵

m. Evacuation of oil from the line will be difficult and take a very long time.

Enbridge states it can easily evacuate the oil in the pipeline if necessary. In fact, this is very difficult, if even possible, would take a long time, and would

³⁹ Id., p. 1.

⁴⁰ Appendix 2B, Table 2, p. 4 (document Appendix_B4_493991_7.pdf, MPP Task Force Record).

⁴¹ Id., p. 3-4.

⁴² Appendix 2D, Fig. C.1, pp. 1-3.

⁴³ Id., p. 3.

⁴⁴ Id., p. 3.

⁴⁵ See Appendix 2B, 1, pp. 1 and 4.

be incomplete. Moreover, even if hydrostatic pressure prevented immediate release, a release could likely occur from other factors.⁴⁶

n. Myopic review and behavioral bias in reviewing data and assuring pipeline safety are endemic to the industry.

It has been reported from the BP Gulf oil spill and other catastrophes that risk and consequences are underestimated. Ambiguity in interpretation of rules and standard methodology tend to cause personnel to discount risks. As a result, protective measures are inadequate, and that interdependent risks, such as the location of the nuclear power plant in Fukushima, Japan, are ignored.⁴⁷

o. “Failsafe” detection system failed in an oil pipeline in Canada last month.

In addition to the examples listed in the report, pipeline failures, leaks, and ruptures continue to mount,⁴⁸ last month, a “failsafe” pipeline detection system failed in Canada, resulting in harm to a river larger than the Kalamazoo River rupture in 2010.⁴⁹

2. Proper Legal and Scientific Standard for Imminent Risk or Endangerment of Serious Harm

In determining the imminent threat and endangerment of Line 5, it must be kept in mind that the higher degree of magnitude of harm based on credible release scenarios, especially where the harm is very high and risks extremely challenging such as in the Straits, the lower the degree of probability required for imminent harm or endangerment. An “imminent hazard” for transporting hazardous substances or materials, like crude oil, is defined as “the existence of a condition relating to hazardous material that presents a substantial likelihood that death, serious illness, severe personal injury, or a substantial endangerment to health, property, or the environment may occur before the reasonably foreseeable completion date of a formal proceeding begun to risk of that death, illness, injury, or endangerment.”⁵⁰

It is again important to note that the central focus of the definition of “imminent” is on the seriousness or magnitude of the harm, injury, or endangerment, not the probability of the occurrence. In the leading court decision on “imminent” risk or “endangerment” in environmental law, the D.C. Circuit ruled that the government, when faced with uncertainty of devastating or serious harm does not have to wait for a catastrophe or harm

⁴⁶ Id., at p. 5.

⁴⁷ H. Kunreuther, and E. Michel-Kerjan, Overcoming Myopia (Milken Institute Review, 4th Quarter, 2010), pp. 52-53.

⁴⁸ Jordan, Lubetkin, Contact Person, National Wildlife Federation, “NWF to Sue Department of Transportation over Oil Pipeline Oversight Failures,” July 28, 2015, pp. 3-4.

⁴⁹ Schlanger, Newsweek, July 20, 2015. “Offshore” facilities like Line 5 pose substantial and unique harms that are not easily detected or cleaned up, and which are either difficult to oversee or lack oversight and response plans. See “30-Day Notice of Intent to Sue,” *supra*, note 19.

⁵⁰ 49 USC § 5102 (Title 49, Transportation, Subtitle III, Chpt. 51).

to occur, but can act to prevent it.⁵¹ In support of its ruling, the court reasoned that, “The public health [in this case, public trust and waters of the Straits of Mackinac] can be endangered both by a lesser risk of greater harm or higher risk of lesser harm. Danger depends upon the relation between risk and harm presented in each case, and cannot be legitimately pegged to “probable” harm.”⁵² The court further observed that law and common sense “demand regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable.”⁵³

Given the high or catastrophic degree of harm from a release of oil, a hazardous substance, the transport of any crude oil, whether light crude, synthetic, or heavy crude, through Line 5 under the Straits is a “Tier 1” or unacceptable risk and should be eliminated.⁵⁴ The Task Force concluded that the transport of heavy crude oil is an unreasonable risk and should be prohibited.⁵⁵ Light or synthetic crude oil transported in Line 5 would also have devastating and catastrophic consequences to the Straits. Response capability at best will clean up only a portion of oil but not fully remediate the irreparable harm. As a public trustee of our waters, the State has the authority and duty to enforce the Easement and to ensure Enbridge complies with its duty to exercise the due care of a reasonably prudent person. Accordingly, Enbridge cannot reasonably ignore or refuse to respond to the State’s necessary demands to prevent unacceptable risk and harm to public health and safety and public and private property in the Straits and Great Lakes.

3. Interim Stringent Measures to Reduce Imminent or High Risk of Unacceptable Harm to Lower Category of Risk Pending Implementation and Completion of Actions

⁵¹ *Ethyl v. EPA*, 541 Fed 2d 1 (D.C. 1976); See also *Reserve Mining v. EPA*, 514 Fed 2d 492, 519-520 (8th Cir. 1975). For example, see the circuit court decision and order in *Filer Charter Twp. v. Aztec Production Co.*, Manistee County, Michigan Cir. Ct. Case No. 97-8384-CE, Decision on Motion for Summary Disposition, April 28, 1997 (The Court issued injunction that shut down oil well because concentrations of hydrogen sulfide were so high that the threat to public health and safety outweighed other factors and constituted a nuisance. The Court noted that, “[a] nuisance may exist as a dangerous, offensive, or hazardous condition even with the best of care [where the threat of harm is very serious, the threshold of proof is diminished.” (Id., pp. 62-63). Similarly, it is proper to issue a preliminary injunction to protect the status quo of an unpolluted environment, or in this case waters and public trust of the Straits of Mackinac; *Ray v. Mason County Comm’r.*, 393 Mich 294, 224 NW2d 883 (1975) (establishing that “likely pollution, impairment, or destruction of air, water, or natural resources or public trust” are a function of magnitude of harm and risk or probability; unacceptable harm to Michigan’s elk herd and Pigeon River wild area from accidental release and/or oil development.); *Attorney General v. Thomas Solvent*, (status quo is an ante unpolluted environment).

⁵² *Id.*, *Ethyl Corp.*, at 18-20.

⁵³ *Id.*

⁵⁴ Rick J. Kane, Appendix 3.

⁵⁵ Task Force Report, p. 45. While the agreement between the State of Michigan and Enbridge does prohibit the transport of heavy tar sands oil, this ban is not permanent and can be challenged by Enbridge either in court or by legislation. See Agreement between the State of Michigan and Enbridge Energy, Limited Partnership regarding the Transportation of Heavy Crude Oil Through the Straits of Mackinac Pipelines, Section 5, (Sept. 3, 2015).

http://www.michigan.gov/documents/snyder/Final_Agreement_Line_5_Heavy_Crude_Transport_FINAL_complete_090315_499169_7.pdf

Because Line 5 is a “Tier 1” high-level risk and presents an imminent risk of unacceptable harm or endangerment of public trust, environment, and injury to public trust, and other public and private property, immediate interim measures are required to eliminate the “Tier 1” risk pending final actions, such as the appended alternatives assessment, worst-case and independent risk studies, and receipt and investigation concerning additional information.⁵⁶

Industry standard and custom requires one of two options to address and mitigate high-level risks: Option 1, immediately remove oil from transport through Line 5 under the Straits; Option 2, implement interim measures (e.g., temporarily halting transport of crude oil through Line 5 in the Straits segment) while finding a permanent alternative solution.⁵⁷

To reduce the high level of risk and magnitude of unacceptable harm, FLOW’s Technical Advisory Team recommends Option 2, which requires the following concurrent actions:

- (1) *Interim Measures*: immediately impose and implement interim stringent measures to reduce the high-level risk to a temporary lower risk pending completion of the alternatives assessment or study; and
- (2) *Immediate Actions*: convene, conduct, and complete an independent, competent alternatives assessment, together with an independent risk assessment and any other required study needed to make a final decision consistent with Michigan laws and constitution.

The following interim measures should be immediately requested and implemented within 30 days and completed within 90 days, or as soon as possible.

- a. Halting the flow of oil under the Straits segment;
- b. Implementing and completing obtaining verifiable information from Enbridge or other sources in accordance with Specific Task Force Recommendation No. 4;
- c. Conducting additional and more frequent monitoring by Enbridge and federal and state agencies;
- d. Approving a worst-case scenario emergency response plan and staging of adequate emergency response resources at the Straits capable of responding to an approved credible scenario for a major release, based on credible information;
- e. Implementing subject expert panel to evaluate and determine credible worst-case scenario for the Straits segment;

⁵⁶ Appendix 3, Rick Kane, Flow Technical Advisory Team Immediate Implementation and Action Plan for Enbridge Line 5, August 31, 2015, pp. 1-3.

⁵⁷ *Id.*, p. 3.

- f. Reviewing and implementing binding and adequate financial insurance based on independent risks assessment, including credible worst-case scenario; and
- g. Providing that interim measures are established within an immediate time frame pending the final implementation and completion of the alternatives assessment called for by the Task Force Recommendation and described in this FLOW Report.

4. Immediate Actions and Timetables

- a. **Alternatives Assessment.** This requires convening qualified independent subject matter experts, with participation and input from stakeholder groups, to obtain information, investigate, evaluate, and recommend the best alternative to eliminate the risk of a crude oil spill, leak, or release in the Straits Line 5 segment. A timetable should be established, so it is started and completed as soon as practicable. Convene within 60 days, draft report and recommendation of best alternative without high unacceptable risks or harms. Complete final report and recommended action in 180 days.
- b. **Immediate Implementation and Completion of Independent Credible or Worst-Case Scenario Study.** Convene immediately a qualified independent team or panel of subject matter experts, parallel to and/or same as panel that conducts alternatives assessment, to conduct and complete an independent risk analysis, credible worst case scenario, and establishment of adequate financial assurances, or advise and/or and recommend other interim measures. Convene with 60 days and complete within 120 days.
- c. **Immediate Implementation and Completion of General Recommendations Related to Line 5 Alternatives Assessment.** Effectively completing the alternatives assessment will require the partial implementation of some of the Task Force Report's general recommendations that are necessary to evaluate alternatives to oil in Line 5 in the Straits of Mackinac.⁵⁸ This includes mapping of pipelines, emergency response plans and coordinated training for Straits, consultation with PHMSA on oil in the Line 5 segment, and implementation of the independent expert study to establish the worst-case scenario, independent risk assessment, and financial insurance obligations. Complete within 120 days.

⁵⁸ Id., p. 4, and Appendix 3-B.

d. Immediate Enforcement of Easement and Other Actions. The Attorney General and/or the DEQ and/or the DNR should take the following actions to address violations or enforce the terms and conditions of the 1953 Easement:

- (1) Insurance Requirement (Section J): Section J of the Easement provides: “all damage or losses caused to property (including property belonging to or held in trust by the State of Michigan)...” According to the Task Force Report on page 46, “[t]o date, Enbridge has not documented that it is in compliance with this requirement.”

- (2) Support Requirement (Section A (10)): Section A (10) of the Easement states: “The maximum span or length of pipe unsupported shall not exceed seventy-five (75) feet.” The Task Force Report found that Enbridge had failed to install the required structural supports for Line 5, and that there is a risk of failure as a result of the lack of analysis and unknown integrity of the lines.⁵⁹ Because unanticipated currents have caused the gravel bed that originally provided continuous support for the unburied portions of the Line 5 Straits sections to wash out leaving the pipe unsupported, continuous efforts by Enbridge have been required since at least 1975 to add supports to Line 5 and maintain compliance with the requirements of the Easement. Documentation supplied to the MPSC by Enbridge⁶⁰ does not support the assertion that the unburied portions of the Straits sections of Line 5 have been and are in compliance with the Easement. Specifically, Enbridge has installed discrete supports on 1.03 out of 2.1 miles on the east section and 1.02 out of 2.3 miles on the west section, leaving over 50% of the total unburied sections of Line 5 with uncertain support, thus requiring action.

- (3) Pipeline Coating Requirement (Section A (9)): Section A (9) of the Easement states: “All pipe shall be protected by asphalt primer coat, by inner wrap and outer wrap composed of glass fiber fabric material, and one inch by four inch (1” x 4”) slats, prior to installation.” Recent underwater photographic surveys have shown that the circumferential bands used the whole mandated wooden slats around the circumference of the pipeline have rusted away with the result that the wooden slats are missing. These slats, or “circumferential lagging” as they are called in the industry, provide protection against abrasion where the pipe rests on the gravel support bed. Without this protection, it is doubtful that the water barrier coating that protects the steel pipe from external corrosion still fulfills its function, resulting in the risk of excessive corrosion on the bottom of the pipe, with subsequent rupture hazard. The failure to maintain this wooden

⁵⁹ Task Force Report, p. 44; Appendix 2A, Operating Pressure Limits.

⁶⁰ Enbridge Appendix_B.4_493991_7 (2).pdf

protective layer is a clear violation of the conditions of the Easement, and requires action.

- (4) Curvature Requirement (Section A (4)): Section A (4) of the Easement states: “The minimum curvature of any section of pipe shall be no less than two thousand and fifty (2,050) feet radius.” Line 5 is subject to potentially dangerous stress due to unanticipated conditions and circumstances at the time the Easement was granted. The introduction of zebra and quagga mussels into the Great Lakes with the construction of the St. Lawrence Seaway in 1959 has resulted in an accumulation of mussels growing on the unburied portions of the Straits sections of Line 5. This accumulation adds weight to the pipe, resulting in new and increased support requirements beyond the original 75-foot Easement terms. The accumulation also creates an acidic environment under the mussel colony, resulting in corrosion conditions unanticipated by the Easement. Action is required to assess this new risk of harm caused by mussel encrustation, particularly because Enbridge’s 2014 assessment of attached aquatic organizations⁶¹ is incomplete.
- (5) Reasonably Prudent Person and Public Trust Standards. The State should immediately enforce the obligations and liability of Enbridge under the Easement and public trust in the waters, bottomlands, fish and aquatic habitat, ecosystem, and public trust uses as follows:
- (i) This “due care” obligation under the Easement extends to “public property,” which includes public trust bottomlands, waters of Lake Michigan and Lake Huron, fish and ecosystem resources. The acts or omissions described in paragraphs (1) through (4) above constitute a failure to act as a reasonably prudent person to prevent unacceptable harm to public property, private property, and the health and safety of persons who are at risk;
 - (ii) Under the public trust doctrine and the Easement, the State, as trustee, has an affirmative “high, solemn and perpetual” duty to protect these waters, bottomlands, and public trust resources and public uses from unacceptable harm and endangerment. The findings of the Task Force Report, FLOW’s two reports, National Wildlife Federation’s Sunken Hazard Report and others all underscore the imminent and high-level risk of catastrophic harm Line 5 poses to the public trust and protected public trust waters. Failure on the part of Enbridge to implement interim measures or take immediate actions,

⁶¹ GEI Consultants, Enbridge Line 5 – Straits of Mackinaw – Assessment of Attached Aquatic Organisms, Stu Kogge, PWS, Sr. Wetland/Aquatic Biologist, GEI Consultants of Michigan, P.C., and Grant De Jong, Aquatic Biologist, GEI Consultants, Inc., (November 12, 2014).

including those identified by the Task Force Report, constitutes a violation of its Easement obligation to exercise the care of a reasonably prudent person and the public trust. Failure of the State, as trustee, to take immediate action to enforce this obligation and/or the protection of the public trust constitutes a violation of its high, solemn, perpetual, and affirmative duty under the Easement and common law.

Accordingly, the Attorney General, DEQ, DNR, and other state agencies or officials, as trustees, should take immediate action, including directing interim measures, to enforce the Easement and public trust to protect the waters, bottomlands, ecosystem, public uses, private property and businesses, and communities and persons in the Straits and northern Lake Michigan and Lake Huron area.

NOTE: While the Governor’s recent Executive Order 2015-12, Section II, 1 establishes the newly appointed Pipeline Safety Advisory Board, the Executive Order does not provide for any action plan or timeline to address Line 5 under the Straits and through the Great Lakes. Moreover, the role of the Advisory Board is advisory only, and it remains to be seen whether its role is limited to “pipeline safety” or includes the protection of the Great Lakes and public trust duties and paramount protections required for these and other navigable waters.⁶² However, the Executive Order does not interfere with the existing authority of the DEQ, DNR, MPSC, or Attorney General to take whatever actions are necessary to eliminate or prevent the imminent unacceptable harms or endangerment of the Great Lakes from the transport of crude oil in Line 5 under the Straits. Clearly, the Attorney General and Directors of the DEQ and/or DNR can take whatever actions by their duty of office they should or are compelled to take. Accordingly, the enforcement and other actions described above remain urgent and critical. The actions listed in the above paragraphs (a.) through (d.) should be implemented promptly, including strict interim measures to immediately lower the existing high level of risk.

⁶² Mich. Const. 1963, Art 4, § 52 (paramount public concern for air, water, and natural resources”); Great Lakes Submerged Lands Act, MCL 32501 et seq.; *Obrecht v National Gypsum, supra*.

PART II

SPECIFIC SUPPLEMENTAL COMMENTS TO MICHIGAN TASK FORCE REPORT

A MORE BALANCED BACKGROUND FOR “SETTING THE STAGE”: THE TASK FORCE REPORT REQUIRES CONSIDERATION OF THE PARAMOUNT PUBLIC INTEREST IN THE WATERS OF THE GREAT LAKES AND THE STRAITS OF MACKINAC.

The background/setting identified by the Task Force Report focuses only on petroleum and the economy in Michigan and the United States. Oddly, the fundamental background or setting is not mentioned: the Great Lakes ecosystem and the outstanding quality of life, jobs, and economy that depend on these waters. Moreover, the report nearly ignores the Straits and Great Lakes’ heritage, culture, and expansive public and private uses and the venerable public trust principles that protect these waters, their ecosystem, and the paramount public uses that depend on them.⁶³

The Great Lakes make up one-fifth of the surface freshwater in the world and provide unparalleled opportunities for 10 million citizens and millions more tourists. Our lakes benefit the sustainability and prosperity of homes, jobs, the economy, and the way of life of 40 million people. These waters provide Michigan with 823,000 jobs that make up 25 percent of the payrolls in the state.⁶⁴

The Straits of Mackinac have played a primary role in the State’s history, civilization, economy and environment. Historically, the Straits were the center of the fur trade, fishing, and Odawa and Chippewa culture. Since the appearance of Europeans, Mackinac Island and the Straits have been and continue to be the center of fishing, culture, shipping, tourism, recreation, and a high quality of life and environment. Mackinac Island was the United States’ second national park, and Michigan’s first state park. St. Ignace, Mackinac City, Cheboygan, Beaver Island, Drummond Island, and other islands remain at the center of shipping, boating, fishing, tourism, and hospitality in the region.

While oil and fossil fuels remain important to the current U.S. economy, the significance of Line 5 to Michigan and the U.S. oil and gas industry or economy is small compared to the unacceptable risks of devastating and serious harm to the Straits, Michigan’s ecosystem and economy, and protected public trust resources and uses. Further, the value of oil and gas to Michigan’s economy is small compared to the value of the Great Lakes to our jobs, economy, and way of life. In fact, most if not all of the crude oil shipped

⁶³ The U.S. Supreme Court and those of all eight Great Lakes states have recognized that the bottomlands and waters of the Great Lakes are held by the states and managed in public trust for the benefit of citizens for sustenance, fishing, fowling, boating, swimming, drinking water, navigation; public trust interests of the State and citizens are legally paramount to any private purposes or uses. Frey, Bertram and Mutz, *The Public Trust in the Surface Waters and Submerged Lands of the Great Lakes*, 4 U. Mich J. Reform 907-993 (2007); Olson, James, *All Aboard: Navigating the Course for Universal Adoption of the Public Trust Doctrine*, 15 Vt. ENV’T L. J. 135 (2014).

⁶⁴ Michigan Great Lakes Plan: Our Path to Protect, Restore, and Sustain Michigan’s Natural Treasures, MDEQ, Jan. 2009.

through Line 5 starts in Canada and ends in Canada.⁶⁵ There is no appreciable benefit to Michigan refineries by the transport of crude oil through Lake Michigan. Further, the removal of the transport of oil through Line 5 would not affect the transport of natural gas liquid products to the Upper Peninsula or elsewhere.⁶⁶ Enbridge and other oil pipeline companies have a vast network and capacity to move oil, including the recently doubled Line 6B across the Lower Peninsula that transports crude oil to Sarnia, Canada, with spurs to refineries in Detroit and Toledo.⁶⁷

1. A supplementation of the Task Force Report to assist the State in implementing proper measures and actions to address the high risks and unacceptable harm from the transport of oil through Line 5.

a. Existing pipeline maps and other information demonstrates that transporting oil under the Straits in Line 5 is not essential to refineries in Michigan or the US economy.

The MPSC Pipelines Map at page 28 of the Task Force Report identifies the pipelines and the products transported in and through Michigan. Line 6B and Line 5 can transport multiple products at different times. Line 6B transports crude oil to refineries in Detroit and Toledo, as well as Sarnia. Line 5 transports light crude oil and natural gas liquids. No information is presented on Enbridge or other pipeline company's future pipeline routes, capacity, or other plans. The existing and future pipeline routing and capacity and related market for transport or export/import of crude oil is not shown or evaluated. The lines that are shown, principally Line 6B, transport oil to Sarnia with spurs to Detroit and Toledo; most, if not all, crude oil in Line 5 goes to Canada.⁶⁸

Moreover, the continued transport of crude oil or petroleum throughout the U.S. or the Great Lakes region is not dependent on the Straits. In 1952, the State of Michigan allowed Enbridge to choose and then build Line 5 the next year to transport crude oil from Alberta, Canada, to Canadian refineries in Sarnia, Ontario over a route that traveled through Minnesota Wisconsin, Illinois, and up through Indiana and across southern Michigan. At the time, it was expressly built as a short cut for the convenience of Enbridge to transport Canadian oil back to Canada. Interestingly, in 1969, Enbridge located and constructed a route similar to the one it originally rejected in 1952. By contrast, this pipeline does not cross or touch any of the Great Lakes (except near the terminus at Sarnia), although it crosses many vulnerable streams and rivers. Since the disastrous Kalamazoo River spill in 2010, Enbridge has replaced and doubled the capacity of this

⁶⁵ Enbridge's own "Systems Map," 1Q-2015, shows no crude oil going through Line 5 to a Michigan refinery.

⁶⁶ See Appendix. 1, pp. 3-4, Appendix. 1-6; See also attached Appendix 5, North American Pipeline Expansion Plans, Pipeline and Gas Journal, June 2015, p. 46.

⁶⁷ Appendix. 5. These maps illustrate that Michigan and the Great Lakes are merely the conduit for Canada's crude oil, and that there are other pipelines, increased pipeline capacity, and new pipelines or events that demonstrate the likelihood of other feasible and prudent or suitable alternatives.

⁶⁸ Id.; Appendix 1, pp. 3-4, Sub-Appendix.

pipeline in Michigan, known as Line 6B. This and pipelines other than Line 5 transport or have the capacity to transport heavy crude oil to Sarnia, Detroit, and Toledo.

Crude oil ranges from 50% to 80% of the petroleum products transported through Line 5 every year; a significant portion of the capacity is used to transport natural gas liquids (“NGLs”).⁶⁹ It is important to point out that NGLs or propane transport through Line 5 would not be affected, if Line 5 no longer transported light crude oil. While NGLs always present a public health and safety threat because of their volatile nature, the extent and magnitude of harm to the water, ecosystem, and communities would be much less to the Great Lakes themselves. Further, while the Task Force Report identifies risks and examples associated with the transport by pipelines, railroads, tanker ships, and trucks, all modes of crude oil transport carry significant risks of spills, breaks, leaks, failures, and harm. However, only shipping and Line 5 under the Straits present a catastrophic risk with a high magnitude of harm to the Great Lakes and the Straits. Currently, there are no tanker shipments of crude oil over the Great Lakes. A Superior, Wisconsin refinery recently announced it would abandon plans to ship crude oil over the Great Lakes because it is not economical.⁷⁰

b. The Michigan regulatory and legal framework is broader and potentially more effective than represented by the Task Force Report.

The legal and regulatory framework remains a very critical part of not only the report, but more importantly the implementation of the recommendations and other actions required to prevent the serious and unacceptable harm from a pipeline leak or rupture. Both the legal and regulatory framework and authority must be fully understood and exercised where necessary to prevent such unacceptable harm, including immediate, interim measures, short-term actions, and long-term actions. Based on a review of statutes and court decisions, the following legal frameworks, tools, and principles strengthen the authority and basis for addressing the imminent and high risks of oil through Line 5, as well as other pipelines.

(1) The Common Law Public Trust Doctrine

As described in earlier submissions from FLOW, the public trust provides a powerful legal basis to prevent or reduce the high magnitude of harm that Line 5

⁶⁹ Enbridge Infographic, “Line 5,” Michigan (“The natural gas liquids (NGLs) transported through Line 5 – nearly half of the line’s throughput, in fact – include propane...”), p. 3, <http://www.enbridge.com/InYourCommunity/Enbridge-in-Michigan>

⁷⁰ Ellison, “Refinery Drops Plans to Ship Heavy Crude Oil Across Great Lakes,” Michigan Live, August 7, 2015. <http://www.michiganlive/news/grand-rapids/Index>.

poses to the Straits and the Great Lakes.⁷¹ Under the common law, public trust standards prohibit subordination or alienation by the state for primarily private purposes or control. The public trust also prohibits impairment of the public trust or public trust waters and related resources in navigable waters like the Straits. Further, the public trust imposes a “solemn and perpetual” legally enforceable duty on both government and private persons or entities to prevent impairment or improper alienation of the public trust.⁷² This duty includes disclosure of all necessary information required to assure that these public trust principles have not been violated.⁷³

When the State passed 1953 Public Act 10, authorizing the State to grant easements for utilities on state bottomlands, it expressly reserved its public trust and proprietary interest and control over the bottomlands and waters of the Great Lakes.⁷⁴ Indeed, under the *Illinois Central Railroad v. Illinois* and Michigan court cases,⁷⁵ the legislature cannot surrender or transfer this public trust interest and control to a private person or entity like Enbridge. Thus, the 1953 Easement to Enbridge’s predecessor could not and did not subordinate or surrender authority to protect the public trust in the Straits from Line 5. Enbridge cannot receive, by a conveyance or agreement to use the waters and bottomlands of the Great Lakes beyond the authority of what the State can convey. If subsequent to the transfer of the 1953 Easement, the State determines that the risk or magnitude of harm to the public trust from the transport of oil is no longer acceptable, then the State is not foreclosed to prohibit or limit the use of Line 5 to protect the public trust or its protected uses.⁷⁶

The Task Force noted in a response to a comment on protection of the public trust under Part 325, NREPA,⁷⁷ that “it does not believe it is necessary to take a position on the legal question of whether Enbridge can be required to apply for a Part 325 [“GLSLA”] conveyance or permit for continued operation of its lines.”⁷⁸ However, the 1953 Easement and the 1953 Public Act 10, specifically reserved

⁷¹ Letter from James Clift, Elizabeth Kirkwood, et al. to Governor’s Task Force, Attorney General Schuette, Director Wyant, and Director Creagh, dated July 1, 2014 (*hereinafter* Joint Line 5 Sign-On Letter (July 1, 2014)).

⁷² Opinion of Attorney General of Michigan, Opinion No. 7162 (2004); *Collins v. Gerhardt*, 237 Mich 38, 211 NW 115, 118 (1926); *Obrecht v. National Gypsum Co.*, *supra*. (1960); see narrative on public trust principles application to Line 5 under the Straits in the Joint Line 5 Sign-On Letter (July 1, 2014). <http://flowforwater.org/wp-content/uploads/2014/10/2014-07-01-FINAL-Line-5-Governor-Ltr-Sign-On-1.pdf>

⁷³ *Obrecht*, *supra*. The GLSLA and public trust duty requires findings or determinations based on a duly recorded record. See informational duty under the public trust doctrine, addressed in *United Plainsmen Ass’n. v. North Dakota State Water Conservation Comm’n*, 247 NW2d 457 (1976).

⁷⁴ MCL 322.651; 1953 P.A. 10.

⁷⁵ *Illinois Central v. Ill. Rail Rd.*, 146 U.S. 387 (1892); *Obrecht*, *supra*; *Nedtweg v. Wallace*, 237 Mich 14, 17-20 (1926).

⁷⁶ *State v. Venice of America Land Co.*, 160 Mich 680 (1910); *Collins v. Gerhardt*, *supra* (“high, solemn and perpetual duty”).

⁷⁷ MCL 32501 et seq. Great Lakes Submerged Lands Act (“GLSLA”).

⁷⁸ Task Force Report, p. 58.

this public trust interest to the State, and Enbridge took the easement subject to the public trust.⁷⁹ Moreover, Enbridge “at all times shall exercise due care of a reasonably responsible person” for the safety of all persons and to prevent harm to such public and private property interests.⁸⁰ Enbridge also acknowledged that it has a continuing obligation to comply with all applicable state laws. The public trust doctrine is incorporated into Part 325 and necessarily operates as a limitation on the power of the State to grant a property interest or easement beyond the scope of public trust law. “The public trust doctrine takes precedence...Grants even if purporting to be in fee simple are given subject to the trust and to action by the state necessary to fulfill its trust responsibilities.”⁸¹

Under the public trust doctrine and Part 325, the State has a continuing, non-delegable duty to prevent unacceptable harm to the public trust. As a matter of law, Enbridge’s easement interest does not exceed the limits of the public trust in the waters and bottomlands of the Straits. Thus, the State has the authority to demand that Enbridge take action according to the Task Force Report recommendations or other action required to eliminate the risks and endangerment from the transport of oil through Line 5. If Enbridge fails to respond, cooperate, or comply with these necessary actions, the State can enforce these actions under its duty and powers to protect the public trust in the Straits and the Great Lakes. Accordingly, one of the primary legal tools for the State is to take immediate interim, short-term, and long-term actions to enforce its duties to protect or directly protect the public trust of the State and citizens from an unacceptable harm or high magnitude of subordination or impairment.

(2) The Michigan Constitution and the Michigan Environmental Protection Act

Article 4, Section 52, Michigan Constitution, 1963, confirms that the “air, water, and natural resources” of the State are of “paramount public concern,” and that the legislature “shall” pass laws to protect the air, water, and natural resources from pollution, impairment, or destruction.” The meaning of “paramount public concern” includes the State’s public trust and sovereign property interest in the bottomlands and waters of the Great Lakes.⁸² The legislature has a mandatory duty to take action to protect water and natural resources.⁸³

⁷⁹ Easement, paragraph J.

⁸⁰ Easement, paragraph A.

⁸¹ *Kootenai Environmental Alliance v. Panhandle Yacht Club*, 671 P. 2d. 1085, 1094 (Idaho 1993). See also *Arizona Center for Law in the Public Interest v Hassel*, 837 P.2d. 158 , 166-168 (App. 1991). The public trust imposes on any conveyance or permits a continuing supervisory, non-delegable duty to protect the public trust from improper subordination actual or high risk of unacceptable harm. *National Audubon v Superior Court of Alpine County*, 658 P.2d. 709 (1983).

⁸² The Michigan Constitution’s paramount public concern for water and natural resources embodies the public trust. *People v. Babcock*, 38 Mich App 336, 348 (1972).

⁸³ *Highway Comm’n v. Vanderkloot*, 392 Mich 159, 220 NW2d 416 (1974).

Michigan’s legislature passed the Michigan Environmental Protection Act (“MEPA”) in 1970.⁸⁴ The State’s Supreme Court has described the MEPA as the State’s response to the constitutional mandate under Art 4, Section 52.⁸⁵ The MEPA expressly prohibits any conduct that is “likely to pollute, impair, or destroy the air, water, or natural resources or the public trust in those resources.”⁸⁶ The Supreme Court has also ruled that both state and local agencies or departments and private entities have a substantive legal duty to prevent degradation of the air, water, and natural resources or public trust in those resources.⁸⁷

Further, state agencies, in the exercise of their regulatory authority and powers, can and must protect water, related water resources, and the public trust by considering and determining whether conduct is likely to pollute or impair water and the public trust. If it is determined that such conduct endangers the public trust or the pollution of water and water resources, it is unlawful unless it is demonstrated that there is “no feasible and prudent alternative” to such conduct.⁸⁸ Finally, the State, its attorney general, or any person or entity can file a civil action in the circuit court of Ingham County or the county where conduct is proposed or taking place to prohibit conduct that is “likely to pollute, impair, or destroy the air, water, natural resources, or public trust of those resources.”⁸⁹

Accordingly, the State (1) can consider taking direct legal action to prevent or reduce high-level risks of imminent harm; the State can request the company or ask a court to stop, terminate, modify, or alter conduct that is an imminent threat or endangerment, or that is likely to pollute or impair the waters and natural resources or public trust of the State and its citizens;⁹⁰ (2) must consider and determine likely effects and whether there are feasible and prudent alternatives to the conduct that is likely to cause such effects; and (3) can and should supplement its statutory framework to further the duties and protection imposed by the MEPA to protect the environment and public trust.⁹¹

Based on the above, the MEPA provides an essential framework and legal basis to address petroleum pipelines and their location, routing, operation, risks and alternatives in Michigan.

⁸⁴ MCL 324.1701 et seq.

⁸⁵ Vanderkloot, *supra*, 220 NW2d at 429 (1974).

⁸⁶ MCL 324.1702, 1703, 1705.

⁸⁷ Ray v. Mason County, *supra*, 224 NW2d at 888.

⁸⁸ MCL 324.1705(2); Vanderkloot, *supra*; Genesco v. DEQ, 250 Mich App 45, 55-56, 645 NW2d 319 (2002).

⁸⁹ MCL 324.1702(1).

⁹⁰ E.g., Attorney General v. Consumers Power Co., 202 Mich App 74 (1993); Attorney General v. Balkema, 191 Mich App 201 (1991); Attorney General v. Thomas Solvent, 146 Mich App 55 (1985); Attorney General v. Huron County Rd Comm’n., 212 Mich App 510 (1995); People v. Broedell, 365 Mich 201 (1961); People v. Babcock, 38 Mich App 336 (1972).

⁹¹ MCL 324.1705(2); Vanderkloot, *supra*; Ray, *supra*; Genesco, *supra*.

(3) The Great Lakes Submerged Lands Act (“Part 325” or “GLSLA”)

The application of the 1955 GLSLA to public trust bottomlands and waters was considered in depth in its letter/report submitted to the Task Force, dated July 1, 2014. The letter demonstrated that because (a) the public trust ownership, control, and duty to protect to the public trust could never be alienated or relinquished, and (b) because this duty is continuing, that the GLSLA would also apply to Line 5 even though the 1953 Easement granted under 1953 Public Act 10 was granted two years earlier.⁹² As noted in the above paragraph (1) on public trust law, Act 10 recognized that any pipeline easement was subject to the State’s public trust interest, and that the 1953 Easement acknowledged and is subject to the State’s continued control and authority over the public trust in the Great Lakes.

The Task Force omitted Part 325 or the GLSLA from its findings on the legal and regulatory framework to address oil pipelines.⁹³ The Task Force also failed to mention the fundamental legal principles or the GLSLA to address the recognized unacceptable harm and risks from the transport of oil in Line 5.⁹⁴

Finally, as to the Straits and Line 5, there is no mention in discussions on the “Regulatory Framework” or the “Straits Pipeline Issues” sections of the report that addresses Enbridge’s applications for permits to improve or expand its occupation of bottomlands and waters of the Straits to install 75 new structural supports to Line 5 between 2002 and July 21, 2015; the State DEQ granted these permits without full review, consideration, or determination that the proposed structures and occupancy and the related continued use and expanded volumes of oil transported in Line 5 under the Straits would improve the public trust interest in these waters, or would not result in significant impairment to the public trust bottomlands and waters as required by the GLSLA. A review of public records made available pursuant to the Freedom of Information Act disclosed that Enbridge requested and the DEQ treated its applications and renewed applications for these new structures as “minor” or “maintenance.”⁹⁵ Although the DEQ and other state officials had full knowledge of these applications and that no final decision had been made, and that the State lacked information and the risks were

⁹² The public trust embodied in the GLSLA is inherent in every existing or future use or occupancy of bottomlands and waters of the Great Lakes. Even Enbridge applied for permits for some of the structures it has placed to support Line 5 under the Straits. This is not surprising, since GLSLA based on public trust in Great Lakes provides continuing supervisory power under State’s duty to protect the public trust. See *Kootenai Environmental Alliance v. Panhandle Yacht Club*, *supra*, 671 P. 2d. at 1094; *Arizona Center for Law in the Public Interest v. Hassel*, *supra*, 837 P.2d. at 166-168; *National Audubon v. Superior Court of Alpine County*, *supra*.

⁹³ Task Force Report, pp. 25-36.

⁹⁴ *Id.*, pp. 40-48.

⁹⁵ There are general and minor categorical permits for activities like residential docks or beach cleaning, or maintenance. MCL 325.32512a. The addition of scores of supports and anchors related to the increase in volume of Line 5 by 20 percent appears to be significantly beyond a minor or maintenance activity.

substantial, the DEQ and the State excused Enbridge from complying with the GLSLA and public trust and allowed Enbridge to avoid full review, public hearings, and the application of standards required for new structures and expanded use of Line 5 in the Great Lakes. Environmental impact, alternatives, necessity, and public trust review was limited to the mere footprints of the structures, and the broader purpose and standards were ignored.

Had the State applied the GLSLA more fully, the State could have properly exercised its continuing and supervisory public trust authority and forced Enbridge to disclose all relevant information on the current status of Line 5, future use and occupancy, worst case scenarios of a release, the magnitude of harm that would devastate public trust waters, fish, habitat, and uses, and the necessity of an alternatives assessment and studies that are inherent under a GLSLA review.

In addition, MEPA's duty to prevent degradation of likely environmental impacts and to consider and determine alternatives should have been applied.⁹⁶ In short, the State intentionally narrowed review even though it had knowledge of the concerns and issues surrounding Line 5 in the Straits, and thus neglected to exercise its available authority under the GLSLA and MEPA.⁹⁷ Had it applied the impact and alternatives consideration and determination to the broader purpose of these bottomland uses and activities as a whole, the State could have exercised its authority and complied with its duty to prevent degradation through an impact and alternatives assessment.

The structural supports were initially labeled an "emergency" by Enbridge in 2002, and yet the majority of the supports were not applied for or permitted until 12 years later in July 2014.

Since the Task Force Report was issued July 14, 2015, Attorney General Schuette has emphatically stated that if an application under Act 10 and the GLSLA for Line 5 were filed today, it would not be approved for an easement or other agreement to occupy and use the Straits of the Great Lakes for the transport of crude oil.⁹⁸

Part 325 or the GLSLA are and should be seen as primary tools to address the high risk and unacceptable harm to the State and the public's paramount public trust interests in the Great Lakes. Future transport of oil in, under, or across the Great Lakes can simply be prohibited by following the precedent in the GLSLA that prohibits any oil and gas development in the Great Lakes.⁹⁹ The transport of

⁹⁶ Ray v Mason County, supra; MCL 324.1705(2); Vanderkloot, supra; Genesco, supra.

⁹⁷ Id.

⁹⁸ News article cite; Note also that Act 10 pipeline easements in the Great Lakes must also comply with the GLSLA. Superior Public Rights v DNR, 80 Mich App 72 (1977) (Defendant utility company obtained easement under Act 10 and occupancy agreement under the GLSLA).

⁹⁹ MCL324.32502, 324.32503, 324.32513. The location of a pipeline would require a form of conveyance or occupancy agreement under the GLSLA, and any construction activity in or on waters or bottomland would require permit under GLSLA. Moreover, the GLSLA expressly prohibits any lease or other

oil in Line 5 under the Straits can be eliminated or addressed by demanding Enbridge to take the required actions and interim measures through exercise of the State's continuing duty and supervisory authority under the public trust and the GLSLA.

(4) The Inland Lakes and Streams Act (“Part 321” or “ILSA”)

Like the GLSLA, the ILSA requires approval and permits for any crossing or placement of pipelines in or under any inland lake or stream. An approval requires full disclosure and evaluation of purpose, risks, environmental impacts, and feasible and prudent alternatives. It requires a showing that there will be no violation of the public trust, riparian rights, or the aquatic habitat and environment of Michigan's lakes and streams.¹⁰⁰ Moreover, if a feasible and prudent alternative location exists, the pipeline must be located and constructed without crossing a lake or stream, or at a location with less adverse impact.¹⁰¹

There are many petroleum pipeline stream crossings in Michigan that remain under the radar. Because of its environmental and public trust authority and review, the ILSA should play an important role in pipeline siting, routing, construction, and prevention of unnecessary harm to the public trust waters, ecosystems, and public and riparian uses, such as community drinking water supplies, businesses, and tourism, as well as fishing, boating, swimming, and other recreation uses made of our lakes and streams.

ILSA and its rules have been supplemented to allow for expedited “general permits” for pipeline repairs, pipeline safety measures, and any new or replacement utility pipeline.¹⁰² If a project qualifies, environmental standards are generally relaxed.¹⁰³ While there are exclusions from this general permitting scheme for Wild and Scenic Rivers and rare, sensitive, or unique natural features,¹⁰⁴ the high recreational, tourism, and public and private property values

conveyance for any oil and gas development in the Great Lakes. MCL 324.32503(2). The Task Force recognizes that the high risk and magnitude of harm from an oil pipeline release, leak or rupture is unacceptable Michigan's Great Lakes; it would seem to follow that the legislature should consider amending Section 32503(2) of the GLSLA to prohibit future oil pipelines in or under the Great Lakes. Further, existing pipelines (there are only two – the Straits and St. Clair River) should be subject to continuing supervisory control and required to obtain reaffirmed approval, with full and comprehensive analyses that demonstrate no high magnitude of harm and that no feasible alternative pipeline route, capacity, or siting exists. Had this been required at the time the 1953 Easement was granted in Great Lakes for the Enbridge Line 5, it undoubtedly would have failed the public purpose test under *Illinois Central Railroad*; since it is undisputed that Line 5 could have been routed where Line 6B is today, across lower Michigan, and that it was allowed only because it was shorter and would save the company the extra expense.

¹⁰⁰ MCL 324.30106; R281.814 (Rule 4). MCL 324.1703, 324.1705(2) and Vanderkloot, Genesco, *supra*.

¹⁰¹ *Id.*

¹⁰² MCL 324.30108; R.281.832 (Pipelines and Conduits, generally); General Permit Categories in the State of Michigan, Feb. 18, 2014, Sections L and R.

¹⁰³ These are required by ILSA, R 281.814, and the MEPA, MCL 324.1705(2).

¹⁰⁴ *Id.* General Permit Categories in the State of Michigan, p. ii.

and uses of our inland lakes and streams are paramount public trust resources. As the Kalamazoo River disaster and other pipeline releases and spills have demonstrated, the high risks and magnitude of damage from occupancy and construction of oil pipelines under or across Michigan's navigable waterways constitute far more than a minor repair activity. In sum, petroleum or hazardous liquid pipelines should be expressly removed or excluded from the general permit category.

(5) The Michigan Public Service Commission Act 16 - Pipeline Siting and Control

As noted in the Task Force Report, the MPSC has broad authority to investigate, control, or regulate the location and piping of crude oil and petroleum products in Michigan.¹⁰⁵ This includes regulation of the intrastate portion of pipelines and intrastate pipelines.¹⁰⁶ Consent is required from local governments for intrastate portions of interstate pipelines, so long as it does not interfere with the location or routes; local consent is required to locate intrastate pipelines.¹⁰⁷ The MPSC is authorized to adopt rules to implement the purposes and intent of its authority and control.¹⁰⁸ However, to date it has not done so, except for compliance by pipeline companies for new pipeline applications or changes in existing pipelines.¹⁰⁹

Further, pipeline companies are not allowed to locate, construct, or operate the pipelines unless they have filed "*full and explicit information*" as to their location and size, capacity, valves, and connections required or used in the operation of any line.¹¹⁰ As a result, the MPSC may exercise authority to prohibit operation of a pipeline for petroleum or crude oil if a company fails to comply with the "full and explicit information" requirement.

The only standards in Act 16 are "necessity" and "public interest" or "public convenience." However, MPSC decisions have interpreted these standards to include required proof that a pipeline is "needed," "safe," "*routed in a reasonable manner*," and "*in the public interest*."¹¹¹ The MPSC has also required consideration of environmental impacts and alternatives. As noted above, the MEPA imposes a duty on public and private entities to prevent environmental

¹⁰⁵ MCL 483.3, Task Force Report, p. 29.

¹⁰⁶ *Dome Pipeline Corp v. MPSC*, 176 Mich App 227, 439 NW2d 700 (1969).

¹⁰⁷ *Mayor of Lansing v. MPSC*, 257 Mich 666 NW2d 298 (2003); App 1, *aff'd* 470 Mich 154, 680 NW2d 840.

¹⁰⁸ MCL 483.3; Task Force Report, p. 29.

¹⁰⁹ R 792.10447.

¹¹⁰ MCL 483.6.

¹¹¹ *Re Wolverine Pipe Line Company*, 2001 WL 306697 (MPSC, 2001), pp. 6-8. An argument that there are not standards in Act 16 would conflict with the intent of the statute and contradict the inherent basis for jurisdiction, and the fact that the MPSC can establish standards through its decisions. *Lakehead Pipeline Co. v. Dehn*, 340 Mich 25, 64 NW2d 903 (1954).

degradation,¹¹² and has a legal duty to consider and determine such likely effects and feasible and prudent alternatives.¹¹³ Indeed, the Court of Appeals recently ruled that the MPSC violated these duties under the MEPA for failing to conduct an adequate consideration of likely effects and alternatives.¹¹⁴

In summary, through rule-making, case law, and/or the MEPA, state pipeline siting, routing, and changes in pipelines are subject to regulation under Act 16. The MPSC can strengthen its review and determinations under its broad authority as suggested by the Task Force Report. Moreover, it appears there is ample authority for the MPSC to assert a continuing duty of pipeline companies to submit full and complete information related to capacity, volume, size, product, and operations of a new or modification of an existing pipeline. This would also include adoption of a set of rules to assert continuing control, including provisions that trigger new authorization and approval if there is an increase in capacity, size, or other improvements made to a pipeline.

Conclusion and Requested Interim and Immediate Actions

Failure to take immediate action violates the 1953 Easement duty and covenant to fully exercise “due care of a reasonably prudent person” and the continuing duty and obligations imposed by the paramount interest in these waters and water resources under the public trust common law and GLSLA.

The transport of oil through the two 20-inch Line 5 pipelines under the Strait of Mackinac presents an imminent risk of irreparable harm to 20 percent of the planet’s fresh surface water in the Great Lakes. Line 5’s margin of safety is seriously limited or compromised because of increased risk of over pressure, weight stresses, endemic corrosion and erosion action, Easement violations, including unilateral change in required supports, aging high risk relationship, misrepresentation or inconsistency of statements by Enbridge, lack of or insufficient information and uncertainty, and human bias or error. Moreover, because of these circumstances, there are significant violations of Enbridge’s “reasonably prudent person” duty and covenant in the 1953 Easement and an imminent threat to the continuing and paramount interest of the State, as trustee, and its citizens, as beneficiaries, in the public trust waters, bottomlands, and resources of Michigan. Further, because of the critical unreasonable risk of unacceptable harm or damage, the State, as owner, through its Attorney General, the DEQ, the DNR, as owner, and/or the powers of the Governor’s Office should take immediate action.

¹¹² Ray v. Mason County, *supra*.

¹¹³ Vanderkloot v State Hwy Comm’n., *supra*; Genesco v. DEQ, 250 Mich App 45, 55-56, 645 NW2d 319 (2002).

¹¹⁴ Buggs v. Michigan Public Service Comm’n, 2015 WL 15975 (Mich Ct. App, Jan. 13, 2015) (unpublished) (Court ruled that the MPSC failed to sufficiently consider environmental impacts and alternatives to a pipeline required by the Michigan Environmental Protection Act, MCL 324.1701 et seq); *see also* In the Matter of the Application of North Dakota Pipeline Company LLC for a Certificate of Need and Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota, __Minn. __, Ct. App. Case No. A15-0016, decided Sept. 14, 2015 (Public Service Commission required to conduct environmental impact statement before a final decision is made on certificate of need and routing for Sandpiper Pipeline).

1. Immediately impose and implement interim measures to reduce the high-level Tier 1 risk in the Straits of Mackinac from transport of oil in Line 5, including halting the transport of oil pending implementation and completion of other immediate actions described below.
2. Establish an independent, unbiased, and qualified study board to implement and complete a standard logistical risk and alternatives assessment (Task Force Specific Recommendation No. 3).
3. Establish an independent, unbiased, and qualified study board (could be the same as No. 2 above) to evaluate the risks, concerns, harm and damage to public health and safety, communities, public and private property, water and ecological resources ecosystems (Task Force Recommendation No. 2). This board will also develop credible release scenarios, including a true “worst-case” scenario based on standard procedures and legal principles, and estimate the amount of financial security or insurance and adequacy of coverage for Line 5 pending final decisions and action.
4. Issue an Executive Order to immediately implement under rule of law the Task Force Report’s recommendations, including those required specifically for Line 5, and other actions and measures.
5. The Attorney General, independently or in conjunction with the Directors of the DEQ and the DNR, should enforce the 1953 Easement and assist in obtaining all information required from Enbridge and take other action prudently necessary to prevent or eliminate risk of harm from transport of oil in Line 5.
6. The Attorney General, and/or the DEQ and the DNR, as fiduciary trustees of public trust waters and state resources, and with obligations to prevent environmental degradation and harm to public safety, health, and welfare, must review and demand compliance with consideration of environmental effects and alternatives to Line 5, including demands, cease and desist orders, and court action if Enbridge violates or continues to violate the 1953 Easement, water and environmental laws, or fails to cooperate as a reasonably prudent person.
7. Specifically, although not by way of limitation, review and require full compliance with the DEQ and MPSC obligations to consider and determine likely water, public trust, and environmental effects and alternatives arising out of DEQ Great Lakes Submerged Lands Act jurisdiction over occupancy of bottomlands and waters by pipeline, and additional and necessary supports or other improvements, and the overall effects and alternatives associated with the siting of Line 5 and other matters within the jurisdiction of the MPSC.

8. Order or enact prohibition of any new oil pipelines in, under, or across the Great Lakes within the State of Michigan, and connecting or tributary lakes or streams; order review, likely risk, impact, and alternatives analysis and determination for all existing oil pipelines in, under, or across the Great Lakes or any connecting or tributary waters. If it is determined that a feasible and prudent alternative line, capacity, or new line exists for any existing oil pipeline, then the existing pipeline shall cease to operate and otherwise be decommissioned in accordance with best and safest technology within a reasonable time but not to exceed three (3) years, unless the owner or operator can clearly demonstrate that there is no unreasonable risk of an unacceptable harm, in which case it can request permission to operate for each of two additional successive three-year periods. The State shall impose stringent interim measures pending any review or additional period of transporting oil, including prohibition or reduction of oil through the pipeline segment that poses a risk of unacceptable harm.

FLOW appreciates the opportunity to submit this report, action plan, and comments. As noted at the outset, the purpose is to present findings, comments, and an action plan with interim measures to the State for consideration and action. FLOW will continue to review these important scientific, legal, and public policy issues, and remains available to present and discuss its findings, comments, and recommended actions.

Appendices 1 through 5 are attached to this report.

Courtesy copies of this report have been sent to the Michigan Public Service Commission.