STATE OF MICHIGAN OFFICE OF THE GOVERNOR DEPARTMENT OF NATURAL RESOURCES

NOTICE OF REVOCATION AND TERMINATION OF EASEMENT INTRODUCTION

Through Governor Gretchen Whitmer and the Department of Natural Resources, the State of Michigan hereby provides formal notice to Enbridge (as defined below) that the State is revoking and terminating the 1953 Easement. The 1953 Easement authorized Lakehead Pipe Line Company, Inc., and its successors, to operate dual pipelines in the Straits of Mackinac to transport petroleum and other products. As more fully described below, the Easement is being revoked for violation of the public trust doctrine, and is being terminated based on Enbridge's longstanding, persistent, and incurable violations of the Easement's conditions and standard of due care. The revocation and termination each take legal effect 180 days after the date of this Notice to provide notice to affected parties and to allow for an orderly transition to ensure Michigan's energy needs are met. Enbridge must cease operation of the Straits Pipelines 180 days after the date of this Notice.

BACKGROUND

On April 23, 1953, the Conservation Commission of the State of Michigan granted an easement entitled "Straits of Mackinac Pipe Line Easement Conservation Commission of the State of Michigan to Lakehead Pipe Line Company, Inc." ("1953 Easement" or "Easement"), a copy of which is attached as Exhibit 1.

The Easement was issued by the Conservation Commission under the authority of 1953 PA 10 and in consideration of a one-time payment of \$2,450.00 by the Grantee to the Grantor.

Subject to its terms and conditions, the Easement granted Lakehead Pipe Line Company, Inc., the Grantee, and its successors and assigns, the right "to construct, lay, maintain, use and operate" two 20-inch diameter pipelines for the purpose of transporting petroleum and other products "over, through, under, and upon" specifically described public trust bottomlands owned by the State of Michigan in the Straits of Mackinac.

The two pipelines subject to the Easement ("Straits Pipelines" or "Pipelines") were completed in 1953 and thereafter have been operated by the Grantee and its successors.

The Grantee's current successors, Enbridge Energy, Limited Partnership, Enbridge Energy Company, Inc., and Enbridge Energy Partners, L.P. (collectively "Enbridge"), operate the Straits Pipelines as part of the Enbridge Line 5 pipeline that

extends from Superior, Wisconsin and across Michigan, to Sarnia, Ontario. Line 5, including the Straits Pipelines, currently transports an average of 540,000 barrels or 22,680,000 gallons of crude oil and/or natural gas liquids per day.

The Governor is the chief executive officer of the State of Michigan. The Department of Natural Resources ("DNR") is the successor to the Conservation Commission, Grantor of the 1953 Easement.

On June 27, 2019, Governor Gretchen Whitmer directed the DNR to undertake a comprehensive review of Enbridge's compliance with the 1953 Easement. The DNR submitted several requests to Enbridge to provide documents and information pertaining to its compliance with the Easement. Beginning in February 2020 and ending in June 2020, Enbridge provided some documents in response to these requests.¹

This Notice is based on review of the records recently submitted by Enbridge, other documents in the public domain, and the legal and factual grounds specified below.

I. REVOCATION OF EASEMENT PURSUANT TO THE PUBLIC TRUST DOCTRINE

The State of Michigan, in both its sovereign and proprietary capacities, is revoking the Easement pursuant to the public trust doctrine.

A. The Public Trust Doctrine

In *Glass v Goeckel*, 473 Mich 667, 678-679 (2005), the Michigan Supreme Court held that the state, as sovereign, is obligated to protect and preserve the waters of, and lands beneath, the Great Lakes. "The state serves, in effect, as the *trustee of public rights* in the Great Lakes for fishing, hunting, and boating for commerce or pleasure." *Id.* at 679 (emphasis added).²

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 $^{^1}$ Among other things, the DNR included a request for records confirming that Enbridge systematically has undertaken efforts (inspections, investigations, assessments and evaluations) to comply with the Easement from its issuance in 1953 to the present. In response, Enbridge produced few contemporaneous records and little evidence that it conducted a pipeline inspection and maintenance program from 1953 to the late 1990s or early 2000s-i.e., during most of the Easement's existence.

² The Michigan Legislature has recognized the public trust doctrine in various state statutes. For example, Part 17 of the Natural Resources and Environmental Protection Act ("NREPA"), the Michigan Environmental Protection Act, grants broad standing to any person to file an action in circuit court "against any person for the protection of the air, water, and other natural resources and the *public trust in these resources* from pollution, impairment, or destruction." MCL 324.1701(1) (emphasis added). In Part 301 of NREPA, Inland Lakes and Streams, the Department of Environment, Great Lakes, and Energy is prohibited from issuing a permit for a proposed project or activity if it will "adversely affect the public trust,"

These public rights are protected by a "high, solemn and perpetual trust, which it is the duty of the state to forever maintain." Collins v Gerhardt, 237 Mich 38, 49 (1926) (emphasis added). As the Michigan Supreme Court long ago explained, "[t]he state is sovereign of the navigable waters within its boundaries, bound, however, in trust, to do nothing in hindrance of the public right of navigation, hunting and fishing." Nedtweg v Wallace, 237 Mich 14, 20 (1926).

Both the United States Supreme Court and the Michigan Supreme Court have held that the public trust doctrine strictly limits the circumstances under which a state may convey property interests in public trust resources. In *Illinois Central Railroad Co v Illinois*, 146 US 387, 455-456 (1892), the United States Supreme Court identified only two exceptions under which such a conveyance is permissible:

The trust with which they are held, therefore, is governmental, and cannot be alienated, except in those instances mentioned, of parcels used in the improvement of the interest thus held, or when parcels can be disposed of without detriment to the public interest in the lands and waters remaining.

The Court held that because neither of those conditions was satisfied by a state statute purporting to grant submerged lands along the Chicago lakefront to a private company, a subsequent state statute revoking that grant and restoring public rights was valid and enforceable. *Id.* at 460.

In *Obrecht v National Gypsum Co*, 361 Mich 399, 412 (1960), the Michigan Supreme Court declared that "[l]ong ago we committed ourselves . . . to the universally accepted rules of such trusteeship as announced by the Supreme Court in *Illinois Central*," including *Illinois Central*'s delineation of the limited conditions under which public trust resources may be conveyed:

[N]o part of the beds of the Great Lakes, belonging to Michigan and not coming within the purview of previous legislation . . . can be alienated or otherwise devoted to private use in the absence of due finding of one of two exceptional reasons for such alienation or devotion to non-public use. One exception exists where the State has, in due recorded form, determined that a given parcel of such submerged land may and should be conveyed 'in the improvement of the interest thus held' (referring to the public trust). The other is present where the State has, in similar form, determined that such disposition may be made 'without detriment to the public interest in the lands and waters remaining.'

which includes consideration of uses of lakes and streams for "recreation, fish and wildlife, aesthetics, local government, agriculture, commerce, and industry." MCL 324.30106 (emphasis added). And, as noted in footnote 3 below, Part 325 of NREPA, Great Lakes Submerged Lands, includes "hunting, fishing, swimming, pleasure boating, or navigation" as public uses. MCL 324.32502 (emphasis added); see also, e.g., MCL 324.32503 & .32505.

Obrecht, 361 Mich at 412-413, quoting *Illinois Central*, 146 US at 455-456 (emphasis added). The Michigan Legislature has incorporated and codified that common-law standard and "due finding" requirement into Part 325 (Great Lakes Submerged Lands) of the Natural Resources and Environmental Protection Act, MCL 324.32501 et seq.³

B. The 1953 Easement Violated the Public Trust and Was Void From its Inception

The 1953 Easement violated the public trust doctrine from its inception because the State never made a finding that the Easement: (1) would improve navigation or another public trust interest; or (2) could be conveyed without impairment of the public trust. The Easement itself contains no such findings, and there is no contemporaneous document in which the State determined that the proposed Easement met either of the two exceptions. In fact, there is no indication whatsoever that the Conservation Commission determined that the conveyance of the Easement and the operation of the Straits Pipelines would improve public rights in navigation, fishing, or other uses protected by the public trust. Moreover, there is no evidence that the Commission determined that the Pipelines' operation could not adversely affect those rights.⁴

Also, contemporaneous approval of the construction of what is now Enbridge's Line 5 in Michigan by the Michigan Public Service Commission ("PSC") lacked any such public trust findings and determinations.⁵

Finally, the enactment of 1953 PA 10, the statute authorizing issuance of the Easement, does not evidence a finding that either of the public trust limitations would

injured" in order to "allow, by lease or agreement, the filling in of patented and unpatented

submerged lands and allow permanent improvements and structures").

³ See, e.g., MCL 324.32502 (conveyance of property interests in submerged lands allowed "whenever it is determined by the department that the private or public use of those lands and waters will not substantially affect the public use of those lands and waters for hunting, fishing, swimming, pleasure boating, or navigation or that the public trust in the state will not be impaired by those agreements for use, sales, lease, or other disposition"); MCL 324.32503(1) (requiring a "finding that the public trust in the waters will not be impaired or substantially affected" in order to "enter into agreements pertaining to waters over and the filling in of submerged patented lands, or to lease or deed unpatented lands"); MCL 324.32505(2) (requiring a "finding that the public trust will not be impaired or substantially

⁴ The 1953 Easement lacks any mention of the two required findings and merely states the following: "WHEREAS, the Conservation Commission is of the opinion that the proposed pipe line system will be of benefit to all of the people of the State of Michigan and in furtherance of the public welfare" and "WHEREAS, the Conservation Commission duly considered the application of Grantee and at its meeting held on the 13th day of February, A.D. 1953, approved the conveyance of an easement."

⁵ PSC Opinion and Order for the 1953 Line 5 pipeline (March 31, 1953), https://www.michigan.gov/documents/deg/Appendix_A.3_493982_7.pdf.

be satisfied by the Straits Pipelines. That legislation merely authorized the Conservation Commission to grant easements for pipelines, electric lines and telegraph lines on certain state lands and lake bottomlands, subject to terms and conditions determined by the Commission. The statute did not find or determine that the 1953 Easement, as subsequently granted, would either benefit public trust uses or not impair such uses of the Great Lakes and the bottomlands.

In the absence of either of the due findings required under the public trust doctrine, the 1953 Easement was void from its inception.

C. Current and Continued Use of the Straits Pipelines Violates the Public Trust

As noted above, public rights in navigable waters "are protected by a high, solemn, and perpetual trust, which it is the duty of the state to forever maintain." Collins, 237 Mich at 49 (emphasis added). The State did not surrender its trust authority and concurrent responsibilities when it granted the 1953 Easement to Enbridge's predecessor. "The state, as sovereign, cannot relinquish [its] duty to preserve public rights in the Great Lakes and their natural resources." Glass, 473 Mich at 679. A state's conveyance of property rights "to private parties leaves intact public rights in the lake and its submerged land. . . . Under the public trust doctrine, the sovereign never had the power to eliminate those rights, so any subsequent conveyances . . . remain subject to those public rights." Id. at 679-681 (emphasis added).

Under Michigan law, all conveyances of bottomlands and other public trust resources are encumbered by the public trust. *Nedtweg*, 237 Mich at 17. When the State conveys a property interest in Great Lakes bottomlands, "it necessarily conveys such property *subject to the public trust*." *Glass*, 473 Mich at 679. Even if initially valid, the 1953 Easement remains subject to the public trust and the State's continuing duty to protect the Great Lakes public trust resources. Indeed, the Easement itself broadly reserved the State's rights. 1953 Easement, Paragraph M ("All rights not specifically conveyed herein are reserved to the State of Michigan.").

As the United States Supreme Court held in *Illinois Central*, a grant of property rights in public trust resources "is necessarily revocable, and the exercise of the trust by which the property was held by the state can be resumed at any time." 146 US at 455. In that case, the State of Illinois subsequently determined that it should rescind its prior grant of lake bottomlands to a private entity and the Court upheld that action.

Recent events have made clear that continued operation of the Straits Pipelines cannot be reconciled with the State's duty to protect public trust uses of the Lakes from potential impairment or destruction. As outlined below, transporting millions of gallons of petroleum products each day through two 67-year old pipelines that lie exposed in the Straits below uniquely vulnerable and busy shipping lanes presents an extraordinary, unreasonable threat to public rights because of the very

real risk of further anchor strikes and other external impacts to the Pipelines, the inherent risks of pipeline operations, and the foreseeable, catastrophic effects if an oil spill occurs at the Straits.

The Straits Pipelines are located where multiple lanes of heavy shipping activity converge and are oriented north-south, perpendicular to the direction of most commercial vessel traffic. Also, despite near-shore sections of the Straits Pipelines (those in waters less than 65 feet deep) being laid in trenches and covered with soil, most of each Pipeline was placed and remains on or above the State-owned lakebed, exposed in open water and with no covering shielding it from anchor strikes or other physical hazards.

In October 2017, Dynamic Risk Assessment Systems, Inc. ("Dynamic Risk"), an independent consulting firm working under a contract with the State of Michigan, issued the final report of its Alternatives Analysis for the Straits Pipelines ("Dynamic Risk Report") that included, among other things, an analysis of the risks associated with continued operation of the existing Pipelines. Dynamic Risk determined that the dominant threat of a rupture to the Pipelines is the inadvertent deployment of anchors from ships traveling through the Straits. The Report noted that inadvertent anchor strikes are known in the industry to be the principal threat to offshore pipelines. They are both "increas[ing] in frequency" and "not influenced by mitigation measures."

According to the Dynamic Risk Report, the risk of a pipeline-anchor incident depends largely on four "vulnerability factors": (1) size of the pipeline; (2) water depth (relative to anchor chain length); (3) pipeline protection (depth of burial, use of armoring material); and (4) number and size distribution of ship crossings per unit of time. Dynamic Risk found that the Straits Pipelines score high on all four of these factors.⁷

Recent events confirm that the threat of damage to the Straits Pipelines from anchor strikes or impacts from other external objects is very real. In April 2018, a commercial tug and barge vessel inadvertently dropped and dragged an anchor across the lakebed at the Straits. The anchor severed or dragged several electric transmission cables located on the bottom of the Straits near the Pipelines. The anchor actually struck and dented the Pipelines at three locations, though neither Pipeline ruptured. Fortunately, those strikes to the Pipelines happened to occur at locations where the Pipelines rest on the lakebed rather than other areas where they are suspended above it and are particularly vulnerable to anchor hooking.

The 2018 anchor strike was not an isolated event. Most recently, in June 2020, Enbridge disclosed that both the east and west legs of the Straits Pipelines had been

⁶ Dynamic Risk Report, p. 2-35, https://mipetroleumpipelines.com/document/alternatives-analysis-straits-pipeline-final-report.

 $^{^{7}}$ Id., pp. 2-36, 2-42 to -43.

hit by external objects, apparently cables or anchors deployed from vessels operating near the Pipelines, most likely in 2019. Those impacts damaged pipeline coatings and, at one location on the east Pipeline, severely damaged a pipeline support structure previously installed by Enbridge. Tellingly, none of the measures implemented by Enbridge since the April 2018 incident to mitigate the risk of anchor strikes was sufficient to prevent or even contemporaneously detect the recently disclosed impacts to the Pipelines. And while the specific cause(s) of the impacts has not yet been determined, Enbridge's own reports on these events conclude that four of the five vessels potentially responsible for the impacts were operated by Enbridge's own contractors.⁸

According to Dynamic Risk, even apart from their unique vulnerability to anchor strikes, operation of the Straits Pipelines presents inherent risks of environmental harm. Dynamic Risk sought to identify what it classified as the "Principal Threats," i.e., "Threats for which an evaluation of susceptibility attributes indicates a significant vulnerability, and that have the potential to provide the most significant contributions to overall failure probability." The threats considered included "incorrect operations," which were described as follows:

The threats to transmission pipeline integrity from incorrect operations include, but are not necessarily limited to accidental overpressurization, exercising inadequate or improper corrosion control measures, and improperly maintaining, repairing, or calibrating piping, fittings, or equipment.¹⁰

Dynamic Risk concluded that notwithstanding the various operational and procedural changes Enbridge adopted after the Marshall, Michigan Line 6B failure, "incorrect operations" remain a Principal Threat for the Straits Pipelines.¹¹

The Straits of Mackinac are at the heart of the Great Lakes, a unique ecosystem of enormous public importance. As noted in "Independent Risk Analysis for the Straits Pipelines," Michigan Technological University (September 2018), a report commissioned by the State and carried out by a multi-disciplinary team of experts ("Michigan Tech Report"):

The Straits of Mackinac hydraulically link Lakes Michigan and Huron. . . and are wide and deep enough . . . to permit the same average water level in both water bodies, technically making them two lobes of a single large lake. The combined Michigan—Huron system forms the largest lake in the world by surface area and the fourth largest by volume, containing nearly 8% of the world's surface freshwater. The Straits of

⁸ Enbridge Report, Investigation of Disturbances to Line 5 in the Straits of Mackinac Discovered in May and June of 2020 (Updated August 21, 2020), p. 8.

⁹ Dynamic Risk Report, p. 2-11 (emphasis added).

¹⁰ *Id.*, p. 2-37.

¹¹ *Id.*, p. 2-47.

Mackinac serve as a hub for recreation, tourism, commercial shipping, as well as commercial, sport and subsistence [including tribal] fishing . . . 12

An oil spill at the Straits threatens a wide range of highly valuable resources:

The waters and shoreline areas of Lake Michigan and Lake Huron including areas surrounding and adjacent to the Straits of Mackinac contain abundant natural resources, including fish, wildlife, beaches, coastal sand dunes, coastal wetlands, marshes, limestone cobble shorelines, and aquatic and terrestrial plants, many of which are of considerable ecological and economic value. These areas include stretches of diverse and undisturbed Great Lakes shorelines that provide habitat for many plant and animal species.¹³

Among other complicating factors, water currents in the Straits are unusually strong, complex, and variable:

Water currents in the Straits of Mackinac can reach up to 1 [meter per second] and can also reverse direction every 2-3 days flowing either easterly into Lake Huron or westerly towards Lake Michigan. . . . Flow volumes through the Straits can reach 80,000 [cubic meters per second] and thus play essential roles in navigation and shipping in this region, the transport of nutrients, sediments and contaminants between Lakes Michigan and Huron, and also the ecology and biodiversity of this region. ¹⁴

Consequently, oil spilled into the Straits could be transported into either Lake, and depending upon the season and weather conditions, could impact up to hundreds of miles of Great Lakes shoreline.¹⁵

Crude oil contains toxic compounds that would cause both short- and long-term harm to biota, habitat, and ecological food webs. ¹⁶ Numerous species of fish, especially in their early life stages, as well as their spawning habitats and their supporting food chains, are also at risk from an oil spill. ¹⁷ Viewed as a whole, the ecological impacts would be both widespread and persistent. ¹⁸

https://mipetroleumpipelines.com/files/document/pdf/Straits Independent Risk Analysis F inal.pdf.

¹²Michigan Tech Report, p. 26,

¹³ *Id.*, p. 165.

¹⁴ *Id.*, p. 56.

¹⁵ *Id.*, pp. 68-69.

¹⁶ *Id.*, pp. 166-169, 176, 181-185.

¹⁷ *Id.*, pp. 192-199.

¹⁸ *Id.*, pp. 213-214.

And "[b]ecause of the unique and complex environment of the Great Lakes and the Straits area," it is uncertain how effectively and at what cost the affected resources could be restored. ¹⁹ The Michigan Tech Report also estimated several types of economic and natural resource damages that would likely result from a worst-case oil spill from the Straits Pipelines. ²⁰ Among other findings, the Report estimated large damages to recreational fishing, recreational boating, commercial fishing, and commercial navigation, ²¹ all activities within the rights subject to the public trust.

The Great Lakes and the Straits of Mackinac also have special ecological, cultural and economic significance for the tribes of Michigan, including, but not limited to, the tribes that retain reserved hunting, fishing and gathering rights in the lands and waters ceded to the United States under the 1836 Treaty of Washington. An oil spill or release from the Straits Pipelines would have severe, adverse impacts for tribal communities. The tribes have fundamental interests in the preservation of clean water, fish and habitat at the Straits. Many tribal members rely on treaty-protected rights of commercial and subsistence fishing in the Straits and other Great Lakes waters that could be impacted by an oil spill or release.

Enbridge's operation of the Straits Pipelines presents a substantial, inherent and unreasonable risk of an oil spill and such a spill would have grave ecological and economic consequences, severely impairing public rights in the Great Lakes and their public trust resources. While Enbridge has proposed to replace the existing Pipelines with a new pipeline to be constructed in a tunnel beneath the lakebed, that project is likely years away from completion at best. For all these reasons, the Governor and the Director of the Department of Natural Resources find that Enbridge's use of the Straits Pipelines is contrary to and in violation of the public trust.

D. The December 19, 2018 Third Agreement Between the State of Michigan and Enbridge Does Not Preclude Revocation of the 1953 Easement

On December 19, 2018, the then Governor of Michigan, the then Director of the DNR, the then Director of the Department of Environmental Quality, and representatives of Enbridge signed a document entitled "Third Agreement Between the State of Michigan, Michigan Department of Environmental Quality, and Michigan Department of Natural Resources and Enbridge Energy, Limited Partnership, Enbridge Energy Company, Inc., and Enbridge Energy Partners, L.P." ("Third Agreement") relating to the Straits Pipelines. The Third Agreement provided

¹⁹ Id., pp. 261-263.

²⁰ *Id.*, pp. 272-318.

²¹ *Id.*, pp. 285-294.

²² Those tribes are the Bay Mills Indian Community, the Grand Traverse Band of Ottawa and Chippewa Indians, the Little River Band of Ottawa Indians, the Little Traverse Bay Bands of Odawa Indians, and the Sault Ste. Marie Tribe of Chippewa Indians. The exercise of those rights in the Great Lakes is covered by the 2000 Consent Decree in *United States v Michigan* to which the State of Michigan is a party.

that, subject to specified conditions, Enbridge could continue to operate the existing Straits Pipelines pending completion of a tunnel beneath the Straits and of a Straits Line 5 Replacement Segment to be constructed and operated within the proposed tunnel.

Specifically, Article 4.1 of the Third Agreement states:

- 4.1 The State agrees that Enbridge may continue to operate the Dual Pipelines, which allow for the functional use of the current Line 5 in Michigan, until the Tunnel is completed, and the Straits Line 5 Replacement segment is placed in service within the Tunnel, subject to Enbridge's continued compliance with all of the following:
- (a) The Second Agreement;
- (b) The Tunnel Agreement;
- (c) This Third Agreement;
- (d) The 1953 Easement; and
- (e) All other applicable laws, including those listed in Section V of the Second Agreement. (Emphasis added.)

Notwithstanding the Third Agreement, the 1953 Easement is subject to revocation under the public trust doctrine, and the Third Agreement's stated conditional right to continue to operate the Straits Pipelines does not preclude that revocation, for at least two reasons. First, as detailed below in Section II of this Notice, Enbridge incurably has violated and continues to violate the 1953 Easement. Second, as set forth above, the public trust doctrine is among the laws that apply to the existing Straits Pipelines and Enbridge's continued operation of the Pipelines violates the public trust.

Section 4.2 of the Third Agreement states in part:

4.2 Provided that Enbridge complies with Section 4.1 above, the State agrees that:

- (c) The replacement of the Dual Pipelines with the Straits Line 5 Replacement Segment in the Tunnel is expected to eliminate the risk of a potential release from Line 5 at the Straits.
- (d) In entering into this Third Agreement, and thereby authorizing the Dual Pipelines to continue to operate until such time that the Straits Line 5 Replacement Segment is placed into service within the Tunnel, the State has acted in accordance with and in furtherance of the public's interest in the protection of waters,

waterways, or bottomlands held in public trust by the State of Michigan.

The language of Section 4.2 quoted above does not and cannot preclude the revocation of the 1953 Easement under the public trust doctrine for at least the following reasons. To begin, it is expressly conditioned on Enbridge's compliance with Section 4.1; as discussed, Enbridge is not, and has not been, in compliance with that provision. Furthermore, nothing in Section 4.2 provides a "due finding" that Enbridge's continued use of public trust bottomlands and waters to operate the existing Straits Pipelines would either enhance the public trust or not impair the public trust uses of waters and lands at the Straits. Section 4.2(d) does not itself supply it. Nor does the related assertion in Section 4.2(c) that the eventual replacement of the existing Pipelines with a new pipeline in the proposed tunnel is expected to eliminate the risk of a potential release from Line 5 at the Straits. It simply does not follow from that assertion that continuing to operate the existing Pipelines until they are replaced would somehow enhance the public trust or not impair it. And nothing else in the Third Agreement suggests, let alone embodies, a finding that continued operation of the Pipelines now, before a tunnel is completed, mitigates the risk of releases from them. Nor, for that matter, could the requisite due finding have been made when the Third Agreement was signed in December 2018, given the substantial, inherent and unreasonable risk of grave harm presented by the continued operation of the Straits Pipelines. See Section I.C, supra.

Finally, even if the Third Agreement contained a lawful finding by the State officials who signed it in 2018 that Enbridge's continued operation of the Straits Pipelines is consistent with the public trust—which it did not—any such finding is not permanently binding on the State and those former State officials' successors, who retain a solemn, perpetual and irrevocable duty to protect the public trust. Accordingly, the Third Agreement does not preclude the revocation of the 1953 Easement for the reasons stated in this Notice.

II. TERMINATION OF EASEMENT FOR VIOLATION AND BREACH BY ENBRIDGE

A. Easement Terms and Conditions

1. Standard of Due Care

Paragraph A of the 1953 Easement provides: "Grantee [originally Lakehead Pipe Line Company, Inc., now Enbridge] in its exercise of rights under this easement, including its designing, constructing, testing, operating, maintaining, and, in the event of termination of this easement, its abandoning of said pipe lines, shall follow the usual, necessary and proper procedures for the type of operation involved, and at all times shall exercise the due care of a reasonably prudent person for the safety and welfare of all persons and of all public and private property" (Emphasis added.)

The standard of due care under the Easement is that of a reasonably prudent person. The Merriam-Webster Dictionary's definition of "prudence" includes "skill and good judgment in the use of resources" and "caution or circumspection as to danger or risk."²³

2. Compliance Obligations

Paragraph A of the Easement further states: "Grantee shall comply with the following minimum specifications, conditions and requirements, unless compliance therewith is waived or the specifications or conditions modified in writing by Grantor "

Among other requirements, the Easement includes specific conditions obligating the Grantee to: (1) maintain a maximum span or length of unsupported pipe not to exceed 75 feet; (2) protect all pipe with a specified coating and wrap; and (3) maintain a minimum curvature of any section of pipe of not less than 2,050 feet radius.²⁴

3. Easement Termination

Paragraph C.(1) of the Easement provides that the Easement may be terminated by Grantor "[i]f, after being notified in writing by Grantor of any specified breach of the terms and conditions of this easement, Grantee shall fail to correct said breach within ninety (90) days, or, having commenced remedial action within such ninety (90) day period, such later time as it is reasonably possible for the Grantee to correct said breach by appropriate action and the exercise of due diligence in the correction thereof"

The stated timeframes for correcting a breach of the Easement presume that the identified breach or violation is "correctable." As more fully explained below, Enbridge has failed for decades to meet its compliance and due-care obligations under the Easement, and it remains in violation of those obligations. There is nothing Enbridge can do to change its past behavior and callous disregard for its duties under the Easement, and its breaches of the Easement's terms and conditions cannot be corrected or otherwise cured.

B. Enbridge Has Violated Conditions of the Easement and the Easement's Standard of Due Care

Enbridge has breached or violated the standard of due care and its obligations to comply with the conditions of the Easement in several fundamental and incurable ways.

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²³ https://www.merriam-webster.com/dictionary/prudence.

²⁴ 1953 Easement, Paragraphs A.(10), (9), and (4).

1. Unsupported Pipeline Spans or Lengths

Paragraph A.(10) of the Easement requires that each Pipeline must be physically supported (i.e., either rest on the lakebed or be supported by some other structure/device) at least every 75 feet. This prohibition of unsupported pipeline "spans" longer than 75 feet serves to protect the structural integrity of the Pipelines from stresses and vibrations that may be caused by the strong currents surrounding the Pipelines. Those same currents can erode the lakebed on which portions of the Pipelines rest, creating excessive spans.

For virtually the entire time the Easement has been in place, Enbridge has ignored the 75' span requirement.²⁵ Documents provided by Enbridge confirm that since at least 1963 and continuing through 2012, Enbridge has known that multiple unsupported pipe spans have exceeded 75 feet but has failed to take remedial action to address the non-compliant spans:

- 1963: 17 spans detected action taken on 0 spans
- 1972: 7 spans detected action taken on 0 spans
- 1975: 13 spans detected action taken on 3 spans
- 1982: 7 spans detected action taken on 0 spans
- 1987: 7 spans detected action taken on 7 spans
- 1992: 17 spans detected action taken on 6 spans (4 spans exceeded 200':

216'; 221'; 292'; 359')

• 1997: 45 spans detected – action taken on 0 spans (4 spans exceeded 200':

278'; 311'; 286'; 421')

- 2001: 50 spans detected action taken on 8 spans
- 2003: 62 spans detected action taken on 16 spans
- 2004: 75 spans detected action taken on 16 spans
- 2005: 40 spans detected action taken on 14 spans
- 2006: 64 spans detected action taken on 12 spans
- 2007: 64 spans detected action taken on 0 spans
- 2010: 62 spans detected action taken on 7 spans
- 2012: 33 spans detected action taken on 17 spans²⁶

Spreadsheet data on pipe spans for Calendar Years 2005 through 2012 provided by Enbridge further confirm that Enbridge failed to take timely corrective action to address span lengths known to exceed 75 feet for significant periods of time,

²⁵ In correspondence to then Attorney General Bill Schuette and then DEQ Director Dan Wyant, dated June 27, 2014, Enbridge refers to a Span Management Program employed by the company *since construction of the dual pipelines* in the Straits of Mackinac. Despite this reference, Enbridge failed to produce any such document(s) or proof of the program's existence and later, through legal counsel, acknowledged that "Enbridge is not aware of a single document that fits this description." Correspondence from William Hassler to Steven Chester, dated May 8, 2020.

²⁶ Summary Information and Tables provided by Enbridge Counsel, June 22, 2020; and June 27, 2014 Correspondence to Bill Schuette and Dan Wyant.

including data indicating delays of up to 3 to 5 years to repair 17 noncompliant spans, 7 years to repair 11 noncompliant spans, and 9 years to repair 17 noncompliant spans. 27

Several documents submitted by Enbridge suggest that at some point in time the company chose to ignore the Easement's 75' span requirement and replace it with a 140' requirement for taking corrective action on unsupported pipe spans. These include a 2003 Onyx ROV Report that indicates Onyx detected 61 pipe spans exceeding 75' and yet only 17 spans exceeding 140' were repaired, leaving 44 pipe spans exceeding 75' unrepaired. Two other documents referring to a 140' span length are the 2004 Kenny Report and the 2016 Kiefner and Associates Report.²⁸

Enbridge has failed to produce any records or evidence that the 75' span length requirement of the Easement was ever waived or modified in writing by the State of Michigan. Enbridge's apparent unilateral adoption of a 140' pipe span criterion in lieu of the 75' Easement condition was itself a violation of the Easement. For virtually the entire life of the Easement, Enbridge disregarded its obligation to comply with the 75' pipe span requirement, and even failed to take corrective action when pipe spans exceeded 200' in length (e.g., see above, unsupported spans of 216' to 421' in length).

For decades, Enbridge violated and neglected its obligations under Paragraph A.(10) of the Easement, and its concomitant duties to inspect, timely repair, and disclose exceedances of pipe spans to the State of Michigan. In doing so, Enbridge exhibited an astonishing lack of candor and indifference to its due-care obligations under the Easement.

2. Pipeline Coatings

Paragraph A.(9) of the Easement requires Enbridge to maintain a multi-layer coating on the Pipelines. This protective coating is intended to prevent the steel from being exposed to environmental factors that could cause corrosion or other physical damage.

Since at least 2003, and continuing until 2014, Enbridge was on notice that heavy biota (i.e., mussels) accumulation on the Straits Pipelines made it impossible to do a detailed analysis of the integrity of the coating/wrap for the Pipelines over much of their length. Despite these repeated warnings, and notwithstanding its affirmative obligation under the Easement to ensure the integrity of the pipeline coating/wrap, documents submitted by Enbridge show it made little to no effort to undertake a more detailed study of the condition of the pipeline coating/wrap until 2016-2017 – a gap of approximately 13-14 years from notice to response.

 $^{^{27}}$ Recent Enbridge Document Submittals; June 27, 2014 Correspondence to Bill Schuette and Dan Wyant; and November 19, 2014 Correspondence to Bill Schuette and Dan Wyant.

²⁸ Onyx Inspection Survey Report (2003); JP Kenney Survey of Spans Report (2004); and Kiefner and Associates Report (October 12, 2016).

The 2003 Onyx ROV Report stated that "[t]he focus of this inspection was to positively identify existing conditions, which could potentially compromise the safety of the line. Examples of these conditions could include *exposed* or unsupported *areas* of pipe, severely degraded or missing coating, or damage caused by impact. . . . The exposed portion of the pipeline is heavily covered in zebra mussel growth, making a detailed analysis of the coating and actual pipe condition impossible." (Emphasis added.)²⁹

The very same notice and warning were repeated in the 2004 Onyx ROV Report, the 2005 Onyx ROV Report, the 2007 Veolia ROV Report, the 2011 Veolia ROV Report, and the 2012 Veolia ROV Report.

In 2014, Ballard Marine Construction completed an ROV and diver inspection of the Straits Pipelines which stated that "a few instance [sic] of a small amount of coating delamination was observed." Several years later, in a 2016 Inspection Report dated January 3, 2017, Ballard Marine once again found "a few instances of a small amount of coating delamination" and stated this information was similar to past findings including data obtained during the 2014 inspection. ³¹

Despite such notice/warnings, Enbridge did not undertake a thorough investigation of the pipeline coating/wrap until it implemented a May 2017 Biota Work Plan required under a federal Consent Decree arising out of the Marshall, Michigan Line 6B failure. At last, after repeated warnings from Onyx (2003, 2004, and 2005) and Veolia (2007, 2011, and 2012), Enbridge committed to evaluating the effect of the biota (mussels) that covered much of the Straits Pipelines.

Pursuant to the Biota Work Plan, Enbridge would also investigate so-called "holidays" (i.e., gaps exposing bare metal) in the external pipeline coating. In March 2017, in response to questions raised by the Michigan Pipeline Safety Advisory Board, Enbridge publicly represented to the Board, whose members included State agency representatives, that no gaps existed on the Pipelines and there was no need for any repairs. ³² Yet in August 2017, Enbridge informed State officials that there were three small areas of bare metal exposed, and later was forced to acknowledge both that it had known of these coating gaps since 2014 and that some were apparently caused by Enbridge during the installation of pipe supports. ³³ Subsequent inspections showed dozens more areas of coating damage. ³⁴

²⁹ 2003 Onyx Inspection Report, pp. 1 and 8.

³⁰ 2014 Ballard Report, p. 9 (emphasis added).

³¹ 2017 Ballard Report, p. 9 (emphasis added).

³² https://www.mlive.com/news/2017/03/enbridge line 5 delamination.html.

³³ https://www.freep.com/story/news/local/michigan/2017/10/27/enbridge-straits-pipeline-coating-michigan/807452001/.

³⁴ https://www.freep.com/story/news/local/michigan/2017/11/14/enbridge-discloses-dozens-more-gaps-straits-mackinac-pipelines-protective-coating/863490001/.

Enbridge's course of conduct, by failing to undertake a detailed examination of the condition of the pipeline coating/wrap despite being on notice of the need to do so for 13-14 years, delaying disclosure to the State of several areas of bare metal for three years after initially denying such conditions existed, and only belatedly undertaking further inspections and repairs when demanded by the State, evidences a pattern of indifference to, and violation of, the conditions of Paragraph A.(9) of the Easement and its obligation to exercise due care.

3. Pipeline Curvature

Paragraph A.(4) of the Easement includes a condition that "[t]he minimum curvature of any section of pipe shall be no less than two thousand and fifty (2,050) feet radius." This condition relating to pipeline curvature limits stresses placed on the Pipelines.

The DNR requested documents and information relating in any way to Enbridge's efforts to ensure compliance with this condition, and Enbridge provided several GEOPIG Geometry Inspection Reports beginning in 2005.³⁵ The GEOPIG Reports do not refer to the pipe's radius curvature but rather record the diameter bend of the pipe. A diameter bend of 1230D feet is equivalent to a minimum curvature of 2,050 feet radius.

Any diameter bend between 0D and 1230D would violate the Easement standard. The GEOPIG Reports, however, only provide data on bends less than 100D. Even with this limitation, the GEOPIG Reports identify 20 to 25 exceedances of the Easement's minimum pipe curvature requirement.³⁶ To the best of the DNR's knowledge, Enbridge has never documented to the State that it took any measures to ensure compliance with this Easement condition when the Pipelines were installed, or reported these exceedances to the State when Enbridge learned of them. Nor are there any records or evidence that the 2,050 feet radius standard of the Easement was ever waived or modified in writing by the State of Michigan.

Enbridge ignored the pipeline curvature mandate of Paragraph A.(4) of the Easement, perhaps from the very beginning with installation of the Straits Pipelines. Noncompliance with the curvature condition continues today and remains uncorrected. This is contrary to the standard of due care imposed by the Easement and represents an ongoing, incurable violation of one of the Easement's fundamental terms and conditions.

4. Unreasonable Risks of Continued Operation of the Straits Pipelines

As discussed in Section I.C above, the continued operation of the Straits Pipelines cannot be reconciled with the State's duty to protect the public trust

³⁵ Enbridge Energy Limited Partnership, GEOPIG Geometry Inspection Reports (2005, 2016, 2018, and 2019).

 $^{^{36}}$ *Id*.

resources of the Great Lakes from the risk of additional anchor strikes or other external impacts to the Pipelines, the inherent risks of pipeline operations, and the foreseeable, catastrophic effects of an oil spill in the Straits. These very same risks and concerns are contrary to and incompatible with Enbridge's obligation under the 1953 Easement to exercise the due care of a reasonably prudent person.

The threat of damage to the Straits Pipelines from anchor strikes and impacts by other external objects remains a clear and present danger. In its Report, Dynamic Risk identified anchor strikes as a "Principal Threat" to the Pipelines, and emphasized that these events are "increas[ing] in frequency" and "not influenced by mitigation measures." As discussed in Section I.C above, in April 2018, a commercial tug and barge vessel inadvertently dropped and dragged an anchor which struck and dented the Straits Pipelines at three locations. But this is not the most recent occurrence of a potential anchor strike causing damage to the Straits Pipelines.

As also discussed in Section I.C above, sometime in 2019, the east and west legs of the Pipelines were hit by external objects (cables or anchors) deployed from vessels operating near the Pipelines. The impacts resulted in severe damage to a pipeline support structure previously installed by Enbridge. The company did not discover the substantial damage done to the support structure until June 2020, and none of the detection, mitigation and protective measures employed by Enbridge since the April 2018 incident were effective in preventing or even timely detecting the 2019 impacts and the damage to the Pipelines. Moreover, as discussed above, according to information provided by Enbridge, four of the five vessels that were potentially responsible for the damage disclosed in 2020 were operated by Enbridge contractors.

In the face of the documented and recently demonstrated vulnerability of the Straits Pipelines to external impacts from anchors and other objects, and the complete failure of safety systems intended to mitigate such impacts, as well as the inherent threats to pipeline integrity from incorrect operations and procedural errors, Enbridge's continued operation of the Straits Pipelines is contrary to and incompatible with its affirmative duty under the Easement to "exercise the due care of a reasonably prudent person for the safety and welfare of all persons and of all private and public property." Under these circumstances, continued operation of the Straits Pipelines presents a substantial, inherent and unacceptable risk of a catastrophic oil spill with grave ecological and economic consequences. *Accord* Michigan Tech Report, discussed *supra*, Section I.C.

C. The December 19, 2018 Third Agreement Between Enbridge and the State of Michigan Does Not Preclude Termination of the 1953 Easement

As noted in Section I.D above, the continued operation of the existing Straits Pipelines under the terms of the Third Agreement is expressly conditioned upon

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³⁷ Dynamic Risk Report, pp. 2-35, 2-42 to -43.

Enbridge's compliance with the 1953 Easement. And, as outlined above, Enbridge incurably has violated and continues to violate the Easement.

Section 4.2 of the Agreement addresses compliance with certain terms and conditions of the Easement discussed in this Notice:

4.2 Provided that Enbridge complies with Section 4.1 above, the State agrees that:

(b) Enbridge's compliance with *Article 5* below demonstrates compliance *with the specified conditions* of the 1953 Easement.

(e) Based on currently available information, the State is not aware of any violation of the 1953 Easement that would not be addressed and cured by compliance with Section 4.1 and Article 5 of this Agreement. (Emphasis added.)

These provisions do not preclude termination of the Easement pursuant to this Notice for at least the following reasons. First, as noted above, Section 4.2 is conditioned on Enbridge's compliance with Section 4.1 of the Third Agreement, and Enbridge is not, and has not been, in compliance with that provision. Second, neither Section 4.2 nor Article 5 addresses in any way two of the terms and conditions of the Easement that form the basis of this Notice of Termination: the obligation to exercise due care and the condition on pipeline curvature in Paragraph A.(4). Third, the statement in Section 4.2(e)—that the State is not aware of any violation of the 1953 Easement that would not be addressed and cured by compliance with Article 5—expressly provided that it was "based on currently available information," i.e., information considered as of December 2018. Here, as noted above, beginning in 2019, the State undertook a systematic investigation and review of Enbridge's compliance with the Easement. It was through that subsequent review that the State has now identified the full scope of repeated past and continuing violations of the Easement that form the grounds for this Notice of Termination.

Article 5 of the Third Agreement, which is referenced in Section 4.2, addresses two of the Easement conditions at issue here: Paragraph A.(9) concerning pipeline coatings (addressed in Section 5.2 of the Third Agreement) and Paragraph A.(10) concerning unsupported pipe spans (addressed in Section 5.3 of the Third Agreement). But the language of Sections 5.2 and 5.3 is limited and qualified in two important ways. First, as in Section 4.2(e), the statements in these provisions of Article 5 regarding compliance with the Easement are expressly qualified by reference to "currently available information":

The State agrees, based upon currently available information, that Enbridge's compliance with the requirements under this Section 5.2

satisfies the requirements of Paragraph A (9) of the 1953 Easement. (Section 5.2(d) (emphasis added).)

The State agrees, based upon currently available information, that Enbridge's compliance with the requirements under this Section 5.3 satisfies the requirements of Paragraph A (10) of the 1953 Easement. (Section 5.3(d) (emphasis added).)

Again, as noted above, the full scope of violations of Paragraphs A.(9) and A.(10) of the Easement discussed in this Notice were identified through the State's recent review of Easement compliance. Moreover, the terms of Sections 5.2 and 5.3 were focused solely on actions to be taken prospectively regarding then current or potential future issues with pipeline coatings and unsupported pipe spans. They do not consider or address the longstanding pattern of Enbridge's violations of Paragraphs A.(9) and A.(10). Accordingly, the Third Agreement does not preclude the termination of the Easement for the reasons stated in this Notice.

Conclusion

By this Notice, the State of Michigan is formally notifying Enbridge that the State is revoking and terminating the 1953 Easement. The Easement is being revoked for violation of the public trust doctrine, and is being terminated based on Enbridge's longstanding, persistent, and incurable violations of the Easement's conditions and standard of due care.

ACCORDINGLY, the State of Michigan, for the legal and factual reasons stated herein:

- A. Revokes the 1953 Easement, effective 180 days after the date of this Notice to provide notice to affected parties and to allow for an orderly transition to ensure Michigan's energy needs are met.
- B. Terminates the 1953 Easement, effective 180 days after the date of this Notice to provide notice to affected parties and to allow for an orderly transition to ensure Michigan's energy needs are met.
- C. Requires Enbridge to cease operation of the Straits Pipelines 180 days after the date of this Notice.
- D. Requires Enbridge to permanently decommission the Straits Pipelines in accordance with applicable law and plans approved by the State of Michigan.

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Gretchen Whitmer Governor	Daniel Eichinger Director, Department of Natural Resources

Date: 11/13/20 Date: 11/13/20

Exhibit 1

1953 Easement

STRAITS OF MACKINAC PIPE LINE EASEMENT CONSERVATION COMMISSION OF THE STATE OF MICHIGAN

TO

LAKEHEAD PIPE LINE COMPANY, INC.

THIS EASEMENT, executed this twenty-third day of April, A. D. 1953, by the State of Michigan by the Conservation Commission, by Wayland Osgood, Deputy Director, acting under and pursuant to a resolution adopted by the Conservation Commission at its meeting held on February 13, 1953, and by virtue of the authority conferred by Act No. 10, P. A. 1953, hereinafter referred to as Grantor, to Lakehead Pipe Line Company, Inc., a Delaware corporation, of 510 22nd Avenue East, Superior, Wisconsin, hereinafter referred to as Grantee,

WITNESSELE:

WHEREAS, application has been made by Grantee for an easement authorizing it to construct, lay and maintain pipe lines over, through, under and upon certain lake bottom lands belonging to the State of Michigan, and under the jurisdiction of the Department of Conservation, located in the Straits of Mackinac, Michigan, for the purpose of transporting petroleum and other products; and

WHEREAS, the Conservation Commission is of the opinion that the proposed pipe line system will be of benefit to all of the people of the State of Michigan and in furtherance of the public welfare; and

WHEREAS, the Conservation Commission duly considered the application of Grantee and at its meeting held on the 13th day of February, A. D. 1953, approved the conveyance of an easement.

NOW, THEREFORE, for and in consideration of the sum of Two
Thousand Four Hundred Fifty Dollars (\$2,450.00), the receipt of which is
hereby acknowledged, and for and in consideration of the undertakings of
Grantee and subject to the terms and conditions set forth herein, Grantor
hereby conveys and quit claims, without warranty express or implied, to
Grantee an easement to construct, lay, maintain, use and operate two (2)
pipe lines, one to be located within each of the two parcels of bottom lands
hereinafter described, and each to consist of twenty inch (20") O D pipe,
together with anchors and other necessary appurtenences and fixtures, for
the purpose of transporting any material or substance which can be conveyed
through a pipe line, over, through, under and upon the portion of the bottom
lands of the Straits of Mackinac in the State of Michigan, together with the
right to enter upon said bottom lands, described as follows:

All bottom lands of the Straits of Mackinac, in the State of Michigan, lying within an area of fifty (50) feet on each side of the following two center lines:

(1) Easterly Center Line: Beginning at a point on the northerly shore line of the Straits of Mackinac on a bearing of South twenty-four degrees, no minutes and thirty-six seconds East (S 24° 00' 36" E) and distant one thousand seven hundred and twelve and eight-tenths feet (1.712.81) from United States Lake Survey Triangulation Station "Green" (United States Lake Survey, Latitude 45° 50' 00", Longitude 84° 44' 58"), said point of beginning being the intersection of the center line of a twenty inch (20") pipe line and the said northerly shore line; thence, on a bearing of South fourteen degrees thirty-seven minutes and fourteen seconds West (S 14° 37' 14" W) a distance of nineteen thousand one hundred and forty-six and no tenths feet (19,146.01) to a point on the southerly shore line of the Straits of Mackinac which point is the intersection of the said center line of the twenty inch (20") pipe line and the said southerly shore line; and is distant seven hundred and seventy-four and seven tenths feet (774.71) and on a bearing of South thirty-six degrees, eighteen minutes and forty-five seconds West (S 36° 18' 45" W) from United States Lake Survey Triangulation Station "A. Mackinac West Base" (United States



Lake Survey, Latitude 45° 47° 14", Longitude 84° 46° 22"),

(2) Westerly Center Line: Beginning at a point on the northerly shore line of the Straits of Mackinac on a bearing of South forty-nine degrees, twenty-five minutes and forty-seven seconds East (S 49° 25' 47" E) and distant two thousand six hundred and thirty-four and nine tenths feet (2,634.91) from United States Triangulation Station "Green" (United States Lake Survey, Latitude 45° 50' 00", Longitude 84° 44' 58") said point of beginning being the intersection of the center line of a twenty inch (20") pipe line and the said northerly shore line; thence on a bearing of South fourteen degrees, thirty-seven minutes and fourteen seconds West (S 140 37' 14" W), a distance of nineteen thousand four hundred and sixty-five and no tenths feet (19,465.01) to a point on the southerly shore line of the Straits of Mackinac which point is the intersection of the said center line of the twenty inch (20") pipe line and the said southerly shore line and is distant one thousand no hundred and thirty-six and four tenths feet (1,036.41) on a bearing of South sixty-three degrees, twenty minutes and fifty-four seconds East (S 63° 20° 54" E) from United States Lake Survey Triangulation Station "A. Mackinac West Base" (United States Lake Survey, Latitude 45° 47' 14", Longitude 84° 461 22").

TO HAVE AND TO HOLD the said easement unto said Grantee, its successors and assigns, subject to the terms and conditions herein set forth, until terminated as hereinafter provided.

This easement is granted subject to the following terms and conditions:

A. Grantee in its exercise of rights under this easement, including its designing, constructing, testing, operating, maintaining, and, in the event of the termination of this easement, its abandoning of said pipe lines, shall follow the usual, necessary and proper procedures for the type of operation involved, and at all times shall exercise the due care of a reasonably prudent person for the safety and welfare

of all persons and of all public and private property, shall comply with all laws of the State of Michigan and of the Federal Government, unless Grantee shall be contesting the same in good faith by appropriate proceedings, and, in addition, Grantee shall comply with the following minimum specifications, conditions and requirements, unless compliance therewith is waived or the specifications or conditions modified in writing by Grantor:

- (1) All pipe line laid in water up to fifty
 (50) feet in depth shall be laid in a ditch
 with not less than fifteen (15) feet of cover.
 The cover shall taper off to zero (0) feet at
 an approximate depth of sixty-five (65) feet.
 Should it be discovered that the bottom material
 is hard rock, the ditch may be of lesser depth,
 but still deep enough to protect the pipe lines
 against ice and anchor damage.
- (2) Minimum testing specifications of the twenty inch (20") OD pipe lines shall be not less than the following:

Shop Test-----1,700 pounds per square inch gauge Assembly Test----1,500 pounds per square inch gauge Installation Test--1,200 pounds per square inch gauge Operating Pressure 600 pounds per square inch gauge

(3) All welded joints shall be tested by X-Ray.

- (4) The minimum curvature of any section of pipe shall be no less than two thousand and fifty (2,050) feet radius.
- (5) Automatic gas-operated shut-off valves shall be installed and maintained on the north end of each line.
- (6) Automatic check valves shall be installed and maintained on the south end of each line.
- (7) The empty pipe shall have a negative buoyancy of thirty (30) or more pounds per linear foot.
- (8) Cathodic protection shall be installed to prevent deterioration of pipe.
- (9) 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.
- (10) The maximum span or length of pipe unsupported shall not exceed seventy-five (75) feet.
- (11) The pipe weight shall not be less than one hundred sixty (160) pounds per linear foot.
- (12) The maximum carbon content of the steel, from which the pipe is manufactured, shall not be in excess of .247 per cent.

- (13) In locations where fill is used, the top of the fill shall be no less than fifty (50) feet wide.
- (14) In respect to other specifications, the line shall be constructed in conformance with the detailed plans and specifications heretofore filed by Grantee with Lands Division, Department of Conservation of the State of Michigan.
- B. Grantee shall give timely notice to the Grantor in writing:
 - (1) Of the time and place for the commencement of construction over, through, under or upon the bottom lands covered by this easement, said notice to be given at least five (5) days in advance thereof:
 - (2) Of compliance with any and all requirements of the United States Coast Guard for marking the location of said pipe lines;
 - (3) Of the filling of said pipe lines with oil or any other substance being transported commercially;
 - (4) Of any breaks or leaks discovered by Grantee in said pipe lines, said notice to be given by telephone promptly upon discovery and thereafter confirmed by registered mail;

- (5) Of the completion of any repairs of said pipe lines, and time of testing thereof, said notice to be given in sufficient time to permit Grantor's authorized representatives to be present at the inspection and testing of the pipe lines after said repairs; and
- (6) Of any plan or intention of Grantee to abandon said pipe lines, said notice to be given at least sixty (60) days prior to commencement of abandonment operations.
- C. The easement herein conveyed may be terminated by Grantor:
 - (1) If, efter being notified in writing by
 Grantor of any specified breach of the terms
 and conditions of this easement, Grantee shall
 fail to correct said breach within ninety (90)
 days, or, having commenced remedial action within
 such ninety (90) day period, such later time as
 it is reasonably possible for the Grantee to correct said breach by appropriate action and the
 exercise of due diligence in the correction thereof;
 or

- (2) If Grantee fails to start construction of the pipe lines authorized herein within two years from date of execution of this instrument; or
- (3) If Grantee fails for any consecutive threeyear period to make substantial use of said pipe lines commercially and also fails to maintain said pipe lines during said period in such condition as to be available to commercial use within thirty (30) days.
- D. Construction of the pipe lines contemplated by this instrument shall not be commenced until all necessary authorization and assent of the Corps of Engineers, United States Army, so far as concerns the public rights of navigation, shall have been obtained.
- E. In the event of any relocation, replacement, major repair, or abandonment of either of the pipe lines authorized by this easement, Grantee shall obtain Grantor's written approval of procedures, methods and materials to be followed or used prior to commencement thereof.
- F. The maximum operating pressure of either of said pipe lines shall not exceed six hundred (600) pounds per square inch gauge.

If there is a break or leak or an apparent break or leak in either of said pipe lines, or if Grantor notifies Grantee that it has good and sufficient evidence that there is or may be a break or leak therein, Grantee shall immediately and completely shut down the pipe line involved and said pipe line shall not be placed in operation until Grantee has conducted a shut-in two (2) hour pressure test of six hundred (600) pounds per square inch gauge showing that no substance is escaping from a break or leak in said pipe line.

G. If oil or other substance escapes from a break or leak in the said pipe lines, Grantee shall immediately take all usual, necessary and proper measures to eliminate any oil or other substance which may escape,

H. In the event the easement herein conveyed is terminated with respect to either or both of said pipe lines, or if any part or portion of a pipe line is abandoned, Grantee shall take all of the usual, necessary and proper abandonment procedures as required and approved by Grantor. Said abandonment operations shall be completed to the satisfaction of Grantor within one year after any abandonment of any part or portion of a pipe line; or in event of termination of this easement, within one year thereafter. After the expiration of one year following the termination of this easement, Grantee

shall at the option of Grantor quit claim to the State of Michigan all of its right, title and interest in or to any pipe line, appurtenances or fixtures remaining over, through, under or upon the bottom lands covered by this easement. Abandonment procedures as used herein include all operations that may be reasonably necessary to protect life and property from subsequent injury.

- 1. Grantee shall permit Grantor to inspect at reasonable times and places its records of oil or any other substance being transported in said pipe lines and shall, on request, submit to Grantor inspection reports covering the automatic shut-off and check valves and metering stations used in connection with the Straits of Mackinac crossing.
- J. (1) Grantee shall indemnify and hold harmless the State of Michigan from all damage or losses caused to property (including property belonging to or held in trust by the State of Michigan), or persons due to or arising out of the operations or actions of Grantee, its employees, servants and agents hereunder. Grantee shall place in effect prior to the construction of the pipe lines authorized by this easement and shall maintain in full force and effect during the life of this easement, and until Grantor has approved completion of abandonment operations, a Comprehensive Bodily Injury and Property Damage Liability policy, bond or surety, in form and substance acceptable to Grantor in the sum of at least One Million Dollars (\$1,000,000.00), covering the liability herein imposed upon Grantee.

- (2) Grantee, prior to commencing construction of the pipe lines authorized by this easement, shall provide the State of Michigan with a surety bond in the penal sum of One Hundred Thousand Dollars (\$100,000,00) in form and substance acceptable to Grantor, and surety or sureties approved by Grantor, to well, truly and faithfully perform the terms, conditions and requirements of this easement. Said bond shall be maintained in full force and effect during the life of this easement and until Grantor has approved completion of Grantee's abandonment operations. Said bond shall not be reduced in amount except with the written consent of Grantor.
- K. Grantee shall within sixty (60) days thereafter notify Grantor in writing of any assignment of this easement.
- L. The terms and conditions of this easement shall be binding upon and inure to the benefit of the respective successors and assigns of Grantor and Grantee.
- M. All rights not specifically conveyed herein are reserved to the State of Michigan.

- N. Grantee shall not improvise, construct or maintain ship-to-shore or ship-to-pipe line loading or unloading facilities over, through, under or upon any of the bottom lands herein described for the purpose of removing material from or injecting material into said pipe lines.
- O. Grantor shall have the right at all reasonable times and places to inspect the pipe lines, appurtenances and fixtures authorized by this easement.
- P. It shall not be a breach of the terms and conditions of this easement if for operating or maintenance reasons Grantee shall make use of only one of said pipe lines at a time.
- Q. Where provision is made herein that Grantee shall obtain the authorization, approval or consent of Grantor, Grantor agrees that it will not unreasonably withhold the same.

IN WITNESS WHEREOF, the State of Michigan by the Conservation Commission, by Wayland Osgood, Deputy Director, acting pursuant to authority specifically conferred upon him, has caused this instrument to be executed this twenty-third day of April, A.D. 1953.

Signed, Sealed and Delivered. in the Presence of:

STATE OF MICHIGAN BY THE CONSERVATION COMMISSION

/s/ Jane Bower
Jane Bower

/s/ Elizabeth Soule
Elizabeth Soule

By /s/ Wayland Osgood

Wayland Osgood, Deputy Director,
pursuant to resolutions of the
Conservation Commission dated
February 13, 1953 and July 10,
1951

STATE OF MICHIGAN)

SS.
COUNTY OF INGHAM)

On this twenty-third day of April, A.D. 1953, before me, a Notary Public, in and for said county, personally appeared Wayland Osgood, Deputy Director, known by me to be the person who executed the within instrument and who, being duly sworn, deposes and says that he is the duly appointed deputy director of the Conservation Commission and that he executed the within easement under authority specifically conferred upon him by law and by the Conservation Commission at its meetings held on February 13, 1953 and July 10, 1951, and who acknowledged the same to be his free act and deed and the free act and deed of the State of Michigan by the Conservation Commission, in whose behalf he acts,

/s/ C. R. Humphrys
C. R. Humphrys, Notary Public, Ingham County, Michigan
My Commission expires September 20, 1954

Examined and approved 4/23/53 as to legal form and effect:

/s/ R. Glen Dunn Assistant Attorney General