STATE OF MICHIGAN
DEPARTMENT OF ATTORNEY GENERAL

P.O. Box 30212
Lansing, Michigan 48909

BILL SCHUETTE
ATTORNEY GENERAL

September 1, 2017

Via Electronic Mail

Bradley F. Shamla
Vice President, U.S. Operations
Enbridge Energy Limited Partnership
Enbridge Pipelines (Lakehead) LLC
7701 Francis Avenue South, Suite 600
Edina, MN 55435

Re: Line 5 Dual Pipelines at the Straits of Mackinac

Dear Mr. Shamla:

We write to you requesting that Enbridge promptly take actions to address the recently disclosed gaps in the external coating of the Line 5 dual pipelines at the Straits of Mackinac. Specifically, as outlined below, we are requesting that Enbridge (a) describe and document the observed gaps in the pipeline coating; (b) inspect the condition of the external coating near each location where Enbridge has previously installed pipeline anchors to determine whether, and to what extent such installation has damaged the external coating; and (c) develop and implement plans to repair the external coating in any areas where it has been damaged or is absent.

Background

As you know, the design specifications for the dual pipelines contained in the 1953 Pipeline Easement granted by the State to Enbridge's predecessor include two types of protections against potential external corrosion of the pipelines: physical protections on the outside of the pipes (asphalt coating and two layers of fiberglass wrap) and cathodic protection. See Easement Conditions A (8) and (9).

On March 8, 2017, we requested that Enbridge provide the State with detailed information regarding the condition and previous inspections of the pipelines. As explained in that letter, we requested that information in order to evaluate Enbridge's compliance with the terms of the 1953 Easement and to clarify Enbridge's previous, confusing statements regarding the existence of so-called

"holidays" in the external pipeline coating referenced in Enbridge's September 2016 Biota Work Plan.[1]

On March 29 and 31, 2017, Enbridge provided detailed responses to the State's information request. With respect to the State's specific request for information about whether, and to what extent bare metal was exposed in any so called "holiday" area referred to in the September 2016 Biota Work Plan, Enbridge responded as follows:

> *Enbridge has seen no evidence that any of the areas identified in the Biota Work Plan as "holiday" areas or areas with "potential delaminated coating" have bare metal exposed.* In addition, a CPCM inline inspection was completed and local cathodic protection currents were measured to determine if any bare metal was present. This inspection has not indicated that there are any holidays in the coating. [Response, Section A. 2. b.ii.]

Enbridge prepared its Revised Biota Work Plan in May. 2017[2] that was approved by US EPA in June, 2017[3]. Enbridge began implementing the Work Plan in August, and we understand that the underwater inspection and sampling portion of the work is currently expected to continue through mid- September.

On August 30, 2017, Enbridge informally notified the State of Michigan by telephone that during the course of the ongoing visual inspection work, Enbridge had identified at least two locations on the pipeline where both the fiberglass wrap and the asphalt coating were absent, leaving bare metal exposed to the water. You characterized these gaps in the external coating as "small" and indicated that the larger of the two was approximately one square foot in size. And you also indicated that at least one of these gaps in the external coating was located adjacent to a place where Enbridge previously installed a pipeline anchor to provide physical support to the pipeline and comply with the 75 foot pipeline span limit specified in the 1953 Easement.

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[1] https://www.epa.gov/sites/production/files/2017-03/documents/enbridge-line5-biota-investigation-workplan-20160927-46pp.pdf

[2] https://www.epa.gov/sites/production/files/2017-05/documents/enbridge_line_5_biota_investigation_work_plan_ma.pdf

[3] https://www.epa.gov/sites/production/files/2017-06/documents/epa_line_5_biota_investigation_work_plan_approval_letter.pdf

This very recent development raises several serious concerns. First, the external pipeline coating, including the asphalt coating layer, is an integral part of the pipeline design that was and remains a condition of the 1953 Easement. While the pipeline is also equipped with cathodic protection to provide additional protection against corrosion, the external coating is an essential element of design measures required to minimize the risk of pipeline failure and to protect the public trust resources of the Great Lakes. Gaps in the coating are unacceptable and should be promptly repaired.

Second, the fact that at least one of the identified gaps in the coating is near a previously installed pipeline anchor strongly suggests that the methods used by Enbridge to install the anchor may have caused the damage to the coating. And, if that occurred at one location, it raises the question of whether the coating was damaged during the installation of any of the other 127 anchors since 2002. Accordingly, the pipelines should be inspected at each of the locations where anchors were previously installed to determine whether the external coating is intact, and if it is not the coating should be promptly repaired.

Third, the fact that damage to the external coating went "undetected" and unreported by Enbridge for some time after the damage was apparently caused by an Enbridge contractor casts doubt on Enbridge's stewardship of the pipeline and its diligence in minimizing risks associated with its operation. As a practical matter, the damage to the coating would presumably have been evident to the contractor at the time the anchor was installed. Enbridge should have had in place procedures for minimizing the risk of damage to the pipeline during anchor installation, detecting damage if it occurred, and promptly repairing it. Enbridge's apparent failure to do so is inconsistent with its continuing obligation under the Easement to exercise reasonable prudence in its operation and maintenance of the pipeline.

Requested Actions

For the reasons outlined above, the State requests the following actions by Enbridge:

1. Within 7 days from the date of this letter, provide the State with an interim report describing each location where damage to the external coating has been observed, the extent and nature of the damage, and any available documentation, including, without limitation, photographs and videos.

2. Within 14 days from the date of this letter, provide the State with a plan to inspect each area on the pipeline where a pipeline anchor was installed to determine whether and to what extent the external coating has been

damaged. The plan should include an implementation schedule and is subject to approval by the State.

3. Within 21 days from the date of this letter, provide the State with a plan detailing the materials, methods and procedures Enbridge will use to repair all areas where damage to the external coating is identified. The plan should include an implementation schedule and is subject to approval by the State. We expect that the Schedule would provide for completion of repairs in the identified areas as soon as possible, and in any event within the same construction season during which they are identified.

We recognize that Enbridge is currently implementing the EPA-approved Biota Work Plan. The pipeline coating inspections and repairs we are requesting are broader in scope than those covered in that Work Plan, and are intended to supplement, not duplicate those actions required by US EPA. To the extent possible, we encourage Enbridge to take advantage of the resources and personnel it has already mobilized at the Straits for carrying out the Biota Work Plan in order to expedite the actions we are requesting.

Thank you for your immediate attention to this matter and your anticipated cooperation.

Sincerely,

Bill Schuette	Keith Creagh	C. Heidi Grether
Attorney General State of Michigan	Director, Department of Natural Resources	Director, Department of Environmental Quality

cc: Governor Rick Snyder
Valerie Brader, Executive Director, Michigan Agency for Energy
Lisa Wilson, Enbridge Energy