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September 8, 2017

Honorable Bill Schuette
Attorney General
State of Michigan
Department of Attorney General
G. Mennen Williams Building, 7th Floor
525 W. Ottawa Street
Lansing, Michigan 48909

Ms. C. Heidi Grether
Director
Michigan Department of Environmental Quality
Constitution Hall
525 West Allegan Street
Lansing, MI 48933

Mr. Keith Creagh
Director
Michigan Department of Natural Resources
Executive Division
525 West Allegan Street
Lansing, MI 48933

Re: Line 5 Dual Pipelines at the Straits of Mackinac and Enbridge response to request letter dated September 1, 2017 – Requested Action 1

Dear Attorney General Schuette, Director Grether and Director Creagh:

This letter responds to your letter of September 1, 2017, regarding ongoing inspections of the Line 5 Dual Pipelines. Enbridge fully understands the importance of safe operation and maintenance of the Dual Pipelines – a goal that is consistent with Enbridge's core values.

Enbridge also understands that the Governor, you, and the people of Michigan, have concerns with the new information regarding small gaps discovered on the protective coating of Line 5 at the Straits.

Enbridge is expanding and accelerating its coating inspection program to immediately address both the repairs of the identified small coating gaps and the inspection of the coating at all existing support anchor locations. A plan for the latter will be forthcoming.

Enbridge is deploying the resources necessary to immediately begin the repairs to the confirmed areas of coating gaps on the pipelines. The repair work could begin as soon as September 11, 2017. Enbridge had anticipated starting the repair work this weekend, however, some necessary supplies have been delayed in delivery from Houston due to Hurricane Harvey. Additional crews and equipment have been brought in so that we can make the repairs simultaneously with the ongoing and expanded coating inspections and the ongoing biota study.

It is important to note, there is no visual evidence or inspection data that suggests any corrosion or impact on the integrity of the pipe at these locations as the redundant systems – external coating and the cathodic protection – continue to protect the pipelines. That said, Enbridge understands that these small gaps in the coating are of concern to many and we are moving to complete the repairs as soon as possible.

Requested Action 1

In your letter dated September 1, 2017, Requested Action 1 asked for an interim report by September 8 describing each location where damage to the external coating has been observed, the extent and nature of the damage, and available documentation. This letter and the attached materials constitute Enbridge's interim report, as requested. Attached to this letter are reports of coating inspections conducted in August 2017. The company continues to gather information as inspections are continuing, and may supplement this interim report going forward.

The coating inspections conducted to date arise from the Biota Work Plan developed under the terms of the Consent Decree agreed by Enbridge with the U.S. Government. Enbridge currently is implementing the Work Plan submitted to the State and EPA earlier this year. As of the date of this letter, Enbridge has inspected coating and/or collected biota samples from 34 of the 37 locations identified in the Work Plan. As previously mentioned, and pursuant to your letter, Enbridge is expanding the coating inspection program to include the inspection of the coating at all existing support anchor locations.

In addition, Enbridge also has inspected a location on the East Straits pipe which was not included in the original Work Plan. At this location, an abandoned 3-inch communications cable in the Straits was inadvertently snagged during the recent inspection and sampling activities, and scratched the coating on the East Straits pipeline. The abandoned 750 foot cable was removed from the lakebed by Enbridge and the repairs to the external coating of the pipeline will be performed along with the other repairs.

In total, as a result of the work completed to date, Enbridge has identified three locations with confirmed areas of coating gaps, plus an additional location (designated EAS-2) at which results are inconclusive and remains under investigation.

As was discussed in our verbal notifications last week, and noted by the State in its letter of September 1, 2017, the areas of coating gaps in one of the locations (designated WAS-1) were likely the result of maintenance activities relating to the installation of a support anchor. Installation procedures, and in particular procedures to stabilize the barge during the installation of support anchors, have been updated to prevent a similar occurrence during future installations.

Results of inspections of these locations to date are summarized in the table below.

Area/Location		No. of Confirmed areas of external coating gaps	Size (approx.)	Comment
East Additional Site-1 (EAS-1)		1	0.1 ft^2	
East Additional Site-2 (EAS-2)		None confirmed	0.14 ft^2	White substance observed and is being analyzed. Repairs will be made regardless of findings.
West Additional Site-1 (WAS-1)		4	0.38 ft^2 (size of all areas combined)	
East Additional Site (August Supplement)	North	1	0.93 ft^2	
	South	2	1.7 ft^2 (size of both areas combined)	

Additional details about all these locations/areas are provided in the five (5) coating inspection reports that are attached. Included in each coating inspection report is information regarding the precise location of each area, precise size of the area, photographs of the areas, and observations and results of tests conducted and measurements made in each area.

Review of the attached reports make clear that there was no evidence of corrosion at the area of coating gaps. Further, visual inspection by the divers, cathodic protection readings, and recent 2017 inline inspection data all confirm that there is no corrosion or metal loss at these locations. Likewise, the high-pressure hydrotest recently successfully conducted by Enbridge on the Dual Pipelines demonstrates that the safety and integrity of the two lines is not in question. Having said this, we are taking immediate action to complete the repairs at these locations.

Enbridge appreciates the State's consideration of the information provided in this interim response. Enbridge's implementation of the Biota Work Plan is continuing. The company will provide the State with a final report on the Biota Work Plan in coordination with submission of that report to EPA.

We look forward to any comments or questions you might have regarding this response.

Sincerely,

ENBRIDGE ENERGY, LIMITED PARTNERSHIP
By Enbridge Pipelines (Lakehead) L.L.C.
Its General Partner

Bradley F. Shamla
Vice President, U.S. Operations

cc: Valerie Brader, Executive Director, Michigan Agency for Energy

Enclosures