Questions and Requests for Information to Enbridge
Regarding the Straits Pipelines

Pipeline Construction, Modification, Useful Life and Replacement

1. Please provide copies of the following:
   a. All design specifications and as-built drawings of the pipelines.
   b. All documents that Enbridge or its predecessor, Lakehead Pipeline Company (“Lakehead”), relied upon from their contractors, inspectors, or any other source to conclude that the pipelines were constructed according to design specifications and the “minimum specifications, conditions and requirements” contained in paragraph A of the Straits of Mackinac Pile Line Easement granted by the Michigan Conservation Commission on April 23, 1953 (“Easement”).
   c. All documents evidencing Lakehead’s and Enbridge’s “compliance with any and all requirements of the United States Coast Guard for marking the location of said pipelines” as stated in the Easement, paragraph B(2).
   d. All available photographs, films, drawings, or other visual representations of the pipelines during and upon completion of construction.

2. Please explain and document which specific portions of the pipelines were, upon completion of construction (a) located beneath the surface of the lake bottomlands and (b) located on or above the surface of the lake bottomlands. As to the latter, please explain and document how and to what extent those portions of the pipelines were initially and are today secured to the lake bottomlands over the length of the pipelines and the varying elevations of the bottomlands surface.

3. Please identify, explain in detail, and document any and all structural changes, that Lakehead, Enbridge, or any intervening owner or operator has to date made to the pipelines and related infrastructure since construction of the pipelines was completed. Please include all available photographs, films, videos recordings, or other visual representations of those structural changes.
4. Please identify and provide copies of all documents prepared by Lakehead, Enbridge or any intervening owner or operator of the pipelines relating to the estimated or assumed useful life of the pipelines, including, but not limited to, any depreciation schedules or accounting documents.

5. How long does Enbridge currently estimate the existing pipelines can safely be used before they are replaced? Please explain and document that estimate in detail, and specifically identify any independent scientific and engineering data upon which Enbridge relies.

6. Please identify and provide copies of any documents prepared by or for Enbridge relating to the possible replacement of the existing Straits pipelines, including, without limitation, designs, costs, contingency plans and schedules.

7. What would be the estimated cost of replacing the existing Straits pipelines with new, state-of-the-art pipelines of the same capacity, designed with secondary containment such as double-walled pipeline? Please provide detailed explanation and documentation of that estimate.

**Existing and Potential Future Uses of the Pipelines**

1. Please identify each type of product or substance that has been transported through the pipelines since they were constructed. For each of the last five years, please identify the quantity of each type of product or substance transported through the pipelines.

2. Is Enbridge considering the possibility of changing the types or quantities of products or substances transported through the pipelines? If so, in what respects?

3. What, if any, notice does Enbridge give to any government agency or the public about changes in the types or quantities of products or substances transported through the pipelines? Has Enbridge requested or obtained approval from any government agency for such changes? Please identify and document any such notices and approvals.

4. Is it possible that Enbridge will transport diluted bitumen through the pipelines? Please identify and provide copies of any documents created by or for Enbridge discussing that possibility.

5. What, in Enbridge’s view, is the economic value of the pipelines? Please explain and document Enbridge’s estimate of that value.

6. How much revenue has Enbridge obtained from operating the pipelines since it began that operation? Please identify and document the amount of
Pipeline Inspections

1. Since the pipelines were constructed, when and by what means has Enbridge or any prior operator of the pipelines inspected or arranged for the inspection of the physical integrity of (a) the portions of the pipelines and related structures that are located below the surface of the water and (b) any portions of the pipelines and related structures that are not located below the surface of the water? Please provide copies of the documents relating to those inspections, the findings obtained, and any actions taken by Enbridge or the prior operator as a result of the inspections.

2. When was the last inspection of the physical integrity of the entire length of the pipelines completed? To the extent not already addressed in response to the preceding question, please document the timing, methods, results of the inspection and any actions taken by Enbridge as a result of the inspection.

3. Please provide copies of any photographs, films, video recordings and in-line inspection data of the pipelines obtained by or for Enbridge.

4. Does Enbridge currently have an established plan, procedure, or schedule for inspection of the physical integrity of the pipelines at regular intervals? If so, please explain and document it, including the methods, timing and supporting rationale.

5. When Enbridge learns of a potential problem with a segment of the pipelines (an anomaly or some other concern), how does Enbridge calculate the risk of a spill or leak? Please explain and document the method(s) used by Enbridge to assess such risks. At what point is that risk judged high enough by Enbridge to warrant some sort of follow-up? At what point is that risk judged high enough to warrant shutting down operation of the pipeline until the problem can be resolved?

6. Does Enbridge notify any government agency of its inspections and report the results of the inspections to the agency? If so, please explain and document such notifications and reports.
Pipeline Leak Prevention, Detection and Control

1. Since the pipelines were constructed, has any oil or other substance ever leaked out of them or been released into the environment? If so, please identify and document, for each such leak or release, if any, (a) when and where it occurred, (b) how it was detected, (c) the type and quantity of the substance(s) involved, (d) whether and to whom it was reported, and (e) what if any actions were taken in response to the leak or release.

2. Please identify, describe in detail and document all methods, procedures and devices currently used by Enbridge to prevent, detect and control potential leaks or releases from the pipelines. Please explain and document the supporting rationale for them and why Enbridge believes they are sufficient given the unique risks presented by the location of the pipelines.

3. For each method, procedure or device used by Enbridge to detect a potential leak, please explain and document how a leak would be distinguished from a column separation.

4. For each method, procedure or device used by Enbridge to detect potential leaks or releases, please identify and document its sensitivity or limits, i.e., the smallest quantity or rate of loss that it can detect. Given the limits of Enbridge’s leak detection methods, what quantity of oil or other substances could be released from the pipelines without detection each day if the pipelines are operating at (a) full capacity, and (b) the average rate of operation over the last year?

5. Please describe in detail and document (a) the number, location and training of Enbridge or contract personnel responsible for continuously monitoring the operation of the Straits pipelines and leak detection methods or devices, and (b) the procedures followed in the event a potential leak or release is detected.

6. Please describe in detail and document the automatic shut-off valve system currently used by Enbridge for the Straits pipelines including the location of the valves, the condition(s) that trigger a shut-off, the amount of time that elapses between the triggering condition and the full shut-off of product at the valve locations. Given the time required to activate the shut-off valves and the location of the valves, what quantity of oil or other substances present in the pipelines between the valves could be released from the pipelines in the event of a leak, if the pipelines are operating at (a) full capacity, and (b) the average rate of operation over the last year? Has Enbridge estimated or obtained an estimate of how widely such quantities of oil could spread in the water before spill response personnel
could arrive at the scene and actually implement spill containment measures? If so, please provide copies of all documents relating to that subject.

**Contingency Planning and Spill Response**

1. Please identify and provide a copy of all contingency plans currently in use by Enbridge and applicable to the Straits pipelines that describe how Enbridge would respond to a spill or leak of oil or other substances from those pipelines. Have such plans been approved by the Pipeline and Hazardous Materials Safety Administration, the U.S. Coast Guard, or any other government agency?

2. How, if at all, do the contingency plans for the Straits pipelines differ from those applicable to the remainder of Enbridge’s Line 5 and specifically address the unique risks presented by the Straits pipelines?

3. How many Enbridge employees or contract personnel are directly responsible for responding at the site of a spill or leak from the Straits pipelines? Where are they located and how long would it take for them to arrive at the scene?

4. Under Enbridge’s currently applicable contingency plan, please explain and document (a) what is the worst case discharge or spill? (b) how much would it cost to clean up a worst case discharge or spill? and (c) how long would it take to clean up a worst case discharge?

**Compliance with Easement Terms**

1. Please provide written documentation that Enbridge is currently in full compliance with all terms and conditions of the April 23, 1953 “Straits of Mackinac Pipe Line Easement” granted by the State of Michigan to Lake Head Pipe Line, Inc., Enbridge’s predecessor in interest.

**Access to Enbridge Records Under the Easement**

1. To the extent not already provided in response to the questions and requests for information above, the State of Michigan requests, pursuant to Section I. of the Easement, copies of or the opportunity to inspect Enbridge’s records of oil or any other substances being transported in the Straits pipelines, as well as inspection reports covering the automatic shut-off and check valves and metering stations used in connection with those pipelines.