

The following addresses the findings and comments made by the Independent Third Party (“ITP”) in the ITP’s “First SAR Report” dated May 31, 2018.

Response as to ¶ 23

The following addresses evaluations in the ISAR to the effect that additional information is needed with respect to the SAR response as to ¶ 23 of the Consent Decree (“Decree”) in order to fully comply with ¶¶ 144 and 145 of the Decree.

Paragraph 23 of the Decree provides that Enbridge “shall submit a report evaluating replacement of the entire portion of the Lakehead System Line 10 oil transmission pipeline between the Canadian border near Niagara Falls, NY, and the terminus pipeline near West Seneca, NY. The report shall evaluate the entire replacement of the entire US Line 10...” Enbridge provided this evaluation report on September 20, 2017 (“Report”), compliant with the Decree timeline.

In late 2017, Enbridge determined that the feature counts used in the Line 10 evaluations, and as documented in the Report, were higher than actually exist in the Line. This was noted in the SAR dated January 18, 2018. The SAR notes that analysis of the revised feature counts was on-going as of the date the SAR was submitted to the EPA.

In the ISAR, ITP communicated that Enbridge did not provide a timeline for completing the analysis of the revised feature counts, nor did it include any findings or conclusions based on the analysis of the revised feature counts in the SAR. The ITP concluded in the ISAR that it was unable to confirm that Enbridge fully complied with ¶¶ 144 and 145 of the Decree because “the SAR does not discuss the facts and circumstances that led to identifying the errors in the feature counts, the steps Enbridge was planning to take, or provide a date or dates for completion of that work.”

Enbridge Response

Enbridge understands the requirements in ¶143 to be that Enbridge is only required to report the information called for by ¶¶ 144-145 within the SAR reporting period. The first reporting period covered the period between May 23, 2017 and November 22, 2017. It was not until December 2017, after the first semi-annual reporting period ended, that Enbridge became aware of sufficient information to identify potential errors related to the feature counts. This information was communicated to the EPA and ITP on January 10, 2018. Enbridge also communicated that although Enbridge had limited information at the time, it was going to provide then available information in the SAR and would provide additional information after the completion of its review and include the update in its second SAR, which it still plans to do.

Separate from the above, in June 2017, Enbridge had initiated a Maximum Operating Pressure (MOP) verification project on Line 10. That verification work was not completed at the time that the Report was due in September 2017. Based on new information on the Line 10 pipe grade that Enbridge confirmed in the course of its MOP project, in late January 2018, after the

first SAR had been submitted, the Enbridge team that prepared the Line 10 report was able to recalculate feature counts, safety factors and rupture pressure ratios. This new data was then included in the revised Report, issued by Enbridge on April 16, 2018. The feature count issue is discussed in more detail per Enbridge's cover letter issued on April 16, 2018 with the revised Report.

In short, at the time of the f submittal of the SAR, Enbridge had neither all of the relevant data that led to the revised Report nor a clear view of what was required to prepare a revised report nor a timeline for submission of such a report. This had been communicated to both the ITP and EPA. Thus, Enbridge respectfully disagrees with the ITP's suggestion that Enbridge did not comply with ¶¶ 144 or 145 in the first SAR.

**Response as to ¶ 29
(including references to related ¶¶ 28, 65 and 66)**

The following addresses the comments in the ISAR to the effect that additional information is needed with respect to the original SAR response as to ¶ 29 of the Decree in order to fully comply with ¶¶ 144 and 145 of the Decree.

Paragraph 28 of the Decree provides that Enbridge shall conduct periodic ILI inspections of each Lakehead Pipeline by using the most appropriate ILI tool on a period determined by ¶¶ 65, 66 and 70 of the Decree. Paragraph 29 of the Decree provides that within 30 days of the Effective Date of the Decree, Enbridge shall submit to EPA a schedule that will identify each ILI scheduled during the first 12 month period of the Decree.

Enbridge's SAR response to ¶ 28 addressed the fact that EPA and Enbridge originally interpreted the requirements of the Decree differently as to the initial scheduling of ILIs, and that those differences had been resolved as set forth in the Stipulation and Agreement executed by the parties and publicly filed with the Court on May 2, 2018.¹

¹ The discussion of ¶ 28 said the following in relevant part:

In-line inspections currently required under Paragraphs 65 and 66 of the Decree for all lines other than Line 2 have been completed. The schedule for inspecting to detect crack features of Line 2 is addressed in the Stipulation and Agreement agreed to by the Parties and expected to be submitted to the court in the near future. In-Line inspections for corrosion features and geometric features on Line 2 are not affected by the Stipulation and Agreement, and have been completed as required under Paragraphs 65 and 66. Enbridge and EPA originally interpreted the scheduling provisions of Paragraph 28 differently. Those differences have been reconciled as set forth in the Stipulation and Agreement.

The SAR's discussion of Paragraph 65, which addresses the maximum intervals between ILIs, similarly referred to the Stipulation and Agreement entered into between EPA and Enbridge as governing the schedule of ILIs going forward.²

Enbridge Response

The SAR ¶ 29 discussion itself did not repeat the references to the Stipulation and Agreement found in ¶¶28 and 65. Enbridge hereby incorporates in its response to ¶29 the statements previously made in ¶¶28 and 65 regarding ILI scheduling, and provides the following additional detail. Thus, Enbridge respectfully disagrees with the ITP's suggestion that Enbridge did not comply with ¶¶144 or 145 in the first SAR.

The Stipulation and Agreement provide a full statement of the factual background and events relating to parties disagreement as it affects ¶ 29 of the SAR. As stated in the Stipulation and Agreement, EPA, consistent with a report prepared by the ITP, concluded and alleged that Enbridge's selected schedule for ILIs did not comply with the requirements of ¶¶ 65 and 66. The ILI inspections that the United States alleged did not meet the requirements of the Decree included:

- A geometry tool inspection of the Bay City to Sarnia segment of Line 5 that Enbridge completed on August 24, 2017. Actual tool pull date was August 24, 2017.
- A geometry tool inspection of the Gretna to Clearbrook segment of Line 2 that Enbridge completed on or about November 2, 2017. Actual tool pull date was November 3, 2017.
- A corrosion tool inspection of the Gretna to Clearbrook segment of Line 2 that Enbridge completed on or about November 2, 2017. Actual tool pull date was November 3, 2017.
- A crack tool inspection of the Clearbrook to Cass Lake segment of Line 4, completed on or about October 17, 2017. Actual tool pull date was October 18, 2017.
- A crack tool inspection of the Superior Terminal to Iron River segment of Line 5, completed by Enbridge on July 19, 2017. Actual tool pull date was July 19, 2017.

² The discussion of ¶65 included the following statement:

The schedule for testing of Line 2 is addressed in the Stipulation and Agreement agreed to by the parties Enbridge and EPA have agreed on the applicability of Paragraph 65 in the Stipulation and Agreement.

- A crack tool inspection of the Gretna to Clearbrook segment of Line 3, completed by Enbridge on November 15, 2017. Actual tool pull date was November 14, 2017.

The United States contended that Enbridge's obligations under ¶¶ 27, 28.b, 30, and 65 and/or 66 required Enbridge to complete ILIs on the line segments shown no later than the date of entry of the Decree. Enbridge disagreed with the allegation that its inspections of the lines in question violated the terms of the Decree. Enbridge contended that the United States' interpretation of the ILI frequency requirements of the Decree were contrary to the language in ¶ 28 of the Decree insofar as the United States' interpretation implied that Enbridge was required to conduct ILIs prior to the Effective Date of the Decree. Following discussions with EPA, Enbridge conducted ILIs on the segments identified above as set forth in Table 4 of the SAR (see page 14 of 275).

The Stipulation and Agreement also addressed inspection of Line 2. After a crack tool inspection of Line 2 in 2013, Enbridge compared ILI tool measurement values for specified features on that pipeline with field measurements of the same features obtained during excavations of various segments of Line 2. One particular focus of the comparison of ILI and field measurements related to crack features on or adjacent to the pipeline's long seam weld. Based on Enbridge's analysis of ILI tool data versus field measurement data, Enbridge concluded that the ILI tools utilized during the 2012 and 2013 crack inspections of Line 2 were not sufficiently reliable to assure long term integrity of that pipeline. As a result, Enbridge planned and implemented a hydrostatic pressure test ("hydrotest") covering the entirety of Line 2 during 2015. The hydrotest was designed and implemented to assure that the largest surviving flaw in each segment of Line 2 had a Remaining Life of at least 10 years from completion of the hydrotest. Results from the hydrotest were provided to the Pipeline Hazardous Materials Safety Administration ("PHMSA") in 2015 for its review. In light of the 2015 Line 2 hydrotest and the resulting Remaining Life calculations, as well as continuing concerns about the reliability of currently available crack tools for accurately detecting and sizing crack features present on Line 2, Enbridge determined that delaying crack tool ILIs on Line 2 until 2020 would not impair the integrity of the pipeline. Although Enbridge conducted the hydrotest to execute its integrity programs, PHMSA recognized and accepted the result as a credible Integrity Verification Program as per the Code of Federal Regulation. EPA concurred.

In the Stipulation and Agreement, Enbridge stated that it was currently in the process of working with ILI vendors to develop and test a new crack tool that would be better able to detect and accurately size crack features on and adjacent to the long seam weld on Line 2. The implementation process for use of any new ILI crack tool developed for Enbridge was set forth in ¶ 14 of the Stipulation and Agreement. Under that agreement between Enbridge and the United States, Enbridge may, following initial development of a new crack tool, do an initial in-line inspection using the new tool on a single segment of Line 2 in order to evaluate the performance and reliability of the new tool before deploying the tool on other segments of Line 2. If analysis of the data received from an initial run of the new tool confirms that the tool provides an acceptable level of reliability as applied to the detection and sizing of crack features on Line 2, Enbridge then will submit a report to the EPA summarizing its evaluation of the new tool. Following any determination by Enbridge that the new crack tool has an acceptable level of reliability, Enbridge intends to complete ILIs as expeditiously as practicable on each remaining segment of Line 2 using the new crack tool. If a crack tool with an acceptable level of reliability

is not developed and validated by Enbridge in accordance with this Paragraph, in time to assure that crack ILIs are completed on each segment of Line 2 using the new crack tool within 5 years after the date the hydrotest was completed in each such section, Enbridge reserves the right to seek modification of the Decree to authorize another hydrotest of Line 2 and an extension of deadlines for crack ILIs on Line 2.

Enbridge has scheduled an ILI crack run on Line 2 (Gretna to Clearbrook segment) for April 2019 and has reported this in the second SAR referencing the 12-month ILI Schedule consistent with the Stipulation and Agreement.

In the course of discussions between the parties, Enbridge identified certain sections of Line 2 where it did not perform crack tool ILIs in accordance with the United States' interpretation of the re-inspection intervals described in ¶¶ 65 and 66 of the Decree. Enbridge's actions were based on its concerns regarding problems with current crack tool reliability on Line 2 and Enbridge's view that the 2015 hydrotest should be considered an adequate demonstration that remaining cracks in the line do not pose a present threat of leaks or ruptures that could discharge oil into waters of the United States. After extensive discussions between EPA and Enbridge regarding the alleged Decree violations described above (which Enbridge denied), and without any admission of liability by Enbridge with respect to the alleged violations, the EPA and Enbridge ultimately resolved claims arising from this dispute as set forth in the Stipulation and Agreement. The resolution included an agreement between Enbridge and EPA that future ILIs would be conducted in a manner consistent with EPA's interpretation of ¶¶ 65-66.

Enbridge believes that the information provided satisfies the requirements of ¶¶ 144 and 145 of the Decree. All of this information was discussed in the Stipulation and Agreement, which was explicitly referred to in the SAR in the sections addressing ¶¶ 28 and 65. A copy of the Stipulation and Agreement is attached hereto for ease of reference.

Line 62

With respect to ¶ 29, the ISAR contains the following statement regarding Line 62 which can be found on page 42:

Line 62 Omission from the SAR Table 7

Enbridge included Line 62 in the ILI schedule submitted in June, 2017. However, no ILI was run in Line 62 during the reporting period, and Line 62 is not noted among the scheduling changes listed in Table 7 of the SAR. In response to an AIR, Enbridge explained that Line 62 has been idled (idle – inactive is a pipeline that is not operating but has been purged) and that the EPA and Enbridge are working towards a modification that will allow deferment of ILI in the idled line until such time that the line resumes

transportation of hydrocarbons. The ITP has determined that this is accurate. However, with the modification not yet in place, the ITP believes changes to Line 62's ILI schedule should be included in the SAR.

Enbridge did not include the Line 62 ILI in the June 2017 ILI schedule or the revised schedule submitted on July 14, 2017. As a result, no change to the ILI for Line 62 occurred. Enbridge and EPA have discussed the fact that Line 62 currently is not operating and that ILIs do not need to be run on that line while it remains out of operation. Enbridge will make this clear in subsequent semi-annual reports.

Response as to ¶ 144 and 145

The following addresses the comments in the ISAR as to ¶ 144 and 145 of the Decree.

Paragraph 143 of the Decree states “... The first Semi-Annual Report, which shall be submitted by Enbridge not later than 240 Days after the Effective Date, shall document activities over the first six months after the Effective Date...”

Paragraph 144 states “Enbridge shall include in the Semi-Annual Report all information that is expressly required under Paragraphs 29, 31, 49, 96 and 110.c of the Consent Decree. In addition, Enbridge shall summarize and discuss the status of compliance with respect to all other requirements in Subsections VII.A-J (Injunctive Measures). Specifically, with respect to each requirement, Enbridge shall discuss such matters as completion of milestones, problems encountered or anticipated in implementing the requirement (together with implemented or proposed solutions), status of permit applications, operation and maintenance issues, reports to state agencies, number by types, of features repaired or mitigated during the reporting period and the number, by type, planned for future repair or mitigation, and any significant changes or issues since the previous semi-annual report.”

Paragraph 145 states “In the event that Enbridge failed to comply with any requirement or deadline under this Consent Decree during the reporting period for the Semi-Annual Report, or if Enbridge anticipates that it will violate a requirement at any time in the future, Enbridge shall identify the likely cause (or causes) of the non-compliance, the facts and circumstance that led (or will lead) to such an event, the remedial steps taken (or to be taken) to rectify the non-compliance, the dates that such steps were taken (or will be taken), the date they complied or will comply with the requirement, and the plan for ensuring that non-compliance is not repeated elsewhere in the future”.

In the ISAR, the ITP included the following statement regarding the requirements of ¶¶144 and 145:

In evaluating the first SAR, the ITP also considered whether the SAR contains the various types and categories of information stipulated in CD ¶144 and ¶145. The ITP provides examples of instances where the SAR does not provide complete discussion and analysis of actions taken toward achieving compliance, or does not provide either the factual bases, or sources of the factual bases, underlying its conclusions of compliance. Those examples are representative of certain categorical deficiencies discussed in the body of this report. The ITP concludes, therefore, that the SAR is Not Compliant with the CD due to these deficiencies. This matter will be further discussed with Enbridge and the EPA. [ISAR at page 5 of 109.]

The ITP, Enbridge and EPA discussed issues relating to ¶¶ 144 and 145 in a call on June 11, 2018. The ITP subsequently provide a 3-pages “Summary of CD ¶ 144/145 Deficiencies” that

included all “Not Compliant” and “Discussion” items from the ISAR, as well as “Compliant” items in which ¶¶ 144 or 145 were mentioned. Enbridge understood that this document provides the details and basis for the non-compliance identified in ¶¶ 144 or 145 in the ISAR.

Enbridge Response

Enbridge here addresses all items included in the ITP’s Summary dated June 12, 2018.

The ITP’s Summary dated June 12, 2018, listed the following items as containing specific references or issues with ¶¶144 or ¶145:

22.a
23
28.a-b
29
34.c
46/46.a
46.b & g
68.a
75
102
144-145

Each of these items is addressed below.

Items 23, 28.a-b, and 29:

Enbridge’s basis for believing that the SAR was compliant with respect to ¶¶ 23 (Line 10 report) and 29 (ILI schedule) appears in the separate sections above. Enbridge believes that the discussion of the Stipulation and Agreement above made in connection with ¶29 applies equally to ¶28 and thus will not repeat that discussion here. In addition, as noted above the original discussion of ¶28 in the SAR itself explicitly referred to the Stipulation and Agreement, which in Enbridge’s view fully addressed all ¶ 144 and 145 issues at issue for this item.

Items 22.a, 34.c, 46.a, 68.a, 75 and 102

All of the items in this group are characterized in the ISAR as yellow-highlighted “Discussion Items.” Enbridge believes that the most productive way to address concerns that the ITP may have regarding these items is to first have the discussions as proposed by the ITP in order to better define remaining issues. Enbridge will propose dates for these discussions in the near future and has already used this feedback to improve some of the sections in its next SAR reporting.

Item 46.b & g (Line 5 BC-RW Alternate Pressure Restriction Proposal)

The ISAR addresses this item at pages 60-61. The ISAR asserts that under ¶46.l the pressure restriction proposal at issue should have been included in January 2018 SAR. (The ISAR noted, however, that Enbridge has provided the ITP and EPA with reports of the rationale and the EA for the Line 5 BC-RW APR.) Enbridge believes that because notification provided to the EPA in accordance with CD ¶42.g was made after the end of the SAR reporting period that the APR should be reported in the SAR to be filed in July 2018.

This item thus appears to reduce to a question of timing. The information sought in fact has been provided to EPA and the ITP, and also will be included in the SAR to be submitted in the near future. In order to resolve this item, Enbridge is prepared to commit to follow the ITP's proposal regarding timing going forward – i.e., to discuss future alternate pressure restrictions under ¶ 46.g in subsequent SARs in the period during which the alternate restriction was taken (regardless of when the supporting documentation was supported).

Items 144 and 145

Pages 95-96 of 109 of the ISAR addressed specific elements of ¶ 144 where the ITP found the SAR insufficient. Page 96 of 109 describes issues relating to ¶145.

The dispute between the parties on these issues appears not to turn on the general requirements of ¶¶ 144 and 145, but how and whether those requirements have been complied with.

For example, the ISAR states (at page 95 of 109) that Enbridge believes that the SAR did not “fully and consistently” summarize and discuss the status of compliance of covered injunctive measures. Enbridge does not dispute the need to “summarize and discuss” compliance issues; rather, the current disagreement between the parties appears to be whether it has done so as fully or consistently as the ITP believes should be required.

Similarly, Enbridge believes that the SAR did set forth the factual and/or analytical elements necessary to demonstrate completeness under CD ¶132.b. The ISAR, however, appears to question whether the SAR does so “internally.” Thus, for example, the ISAR appears to question Enbridge's reference to detailed findings in the ILI Stipulation and Agreement -- which Enbridge intended to incorporate by reference in ¶¶28 and 65 -- is adequate for the purposes of ¶ 144 or 145.

Similarly, the ISAR asserts (at page 95 of 109) that the SAR and related material:

- Does not consistently present the following elements required by CD ¶144:
 - Completion of milestones
 - Problems encountered or anticipated (together with implemented or proposed solutions)
 - Status of permit applications
 - Operation and maintenance issues
 - Reports to state agencies

- Number, by types, of features repaired or mitigated during the reporting period
- The number of features, by type, planned for future repair or mitigation

The only places these failings are specifically mentioned, however, are at ¶¶ 22.a, 23, 28.a-b, 29, 34.c, 46/46.a, 46.b & g, 68.a, 75 and 102, as listed in the ITP's Summary dated June 12, 2018. Each of those provisions is addressed above. The ITP has proposed further discussion about many of these items – a proposal with which Enbridge agrees. Enbridge is hopeful that those discussions will clarify the level of detail needed as it “summarizes” detailed information collected and generated during a given reporting period and allow the parties to reach agreement on a going forward basis.

Finally, Enbridge notes that much of the information that the ISAR seeks is fully available to EPA and/or the ITP. In many cases – such as the ILI Stipulation and Agreement – the information already is completely public. The remaining issue appears to be how to efficiently include such information in the SAR process without unintentionally turning the SAR into a document that is so lengthy, complex and detailed that it fails to serve a useful function.

Enbridge respectfully disagrees with the ITP's suggestion that Enbridge did not comply with ¶¶ 144 or 145 in the first SAR and looks forward to addressing the further discussion items as soon as reasonably possible.