

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

July 27, 2011

Enbridge Energy, Limited Partnership c/o Mr. Rich Adams
Vice President, Operations
Superior City Centre
Second Floor
1409 Hammond Ave.
Superior, Wisconsin 54880

Re: U.S. EPA Notice of Disapproval of Enbridge Energy, Limited Partnership's June 29 and July 14, 2011 submittals in response to the Administrative Order issued by U.S. EPA on July 27, 2010, pursuant to §311(c) of the Clean Water Act (Docket No. CWA 1321-5-10-001) and Supplement to the Administrative Order issued by U.S. EPA on September 23, 2010

Dear Mr. Adams:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the following documents submitted by Enbridge Energy, Limited Partnership, Enbridge Pipelines (Lakehead) L.L.C., Enbridge Pipelines (Wisconsin), and Enbridge Energy Partners, L.P. (herein collectively referred to as "Enbridge"):

- 1. Enbridge Line 6B MP 608, Marshall, MI Pipeline Release, Addendum to Response Plan for Downstream Impacted Areas and the Work Plan for Permanent Recovery of Submerged Oil and Oil-Contaminated Sediments at Priority locations and Ceresco Dam Dredging; as an Attachment to the supplemental modification of the Response Plan for downstream Impact Area and the Source Area response Plan, Strategy, and Tactics for Permanent Recovery of Submerged Oil and Oil-Contaminated Sediment (Commonly referred to as the "2011 Summer Strategic Work Plan") Prepared for United States Environmental Protection Agency, Enbridge Energy, Limited Partnership; Submitted: June 29, 2011
- 2. Enbridge Line 6B MP 608, Marshall MI Pipeline Release, Supplement to the 2011 Summer Strategic Work Plan for the Performance of Dredging Submerged Oil Impacted Sediments(Commonly referred to as the "Dredging Supplement") Prepared for United States Environmental Protection Agency, Enbridge Energy, Limited Partnership: Submitted July 14, 2011.

Pursuant to Paragraph 19 of the July 27, 2010 Order, U.S. EPA disapproves Enbridge's above-referenced 2011 Summer Strategic Work Plan ("SSWP") submitted to U.S. EPA on June 29,

2011 and above-referenced *Dredging Supplement* ("DS") submitted to U. S. EPA on July 14, 2011. Specific comments are set forth below and shall be incorporated into revised work plans.

Comments specific to the SSWP are presented below.

- 1) Please add a section entitled "Purpose" and provide a detailed narrative describing the purpose of the SSWP and specific goals/objectives.
- 2) Please add a section entitled "Post-Recovery Assessment," which shall proceed from upstream to downstream and will be performed after oil removal is performed. The narrative shall provide a detailed description of poling and/or other activities that will be performed to confirm the removal of all submerged oil

3) Section 1.0:

- a. Second full paragraph: Please describe the referenced monitoring that will be performed and include additional monitoring methods (i.e., automated sheen monitoring, quantitative analyses, etc.).
- b. Last paragraph: please quantify the end point for the recovery work (i.e., until light or no submerged oil is detected) or provide a reference to the end points if referenced elsewhere in the SSWP

4) Section 1.1:

- a. Please replace "....identified areas where oil posing a threat to navigable waters remains as both submerged oil and in the flood plain (overbank)." with "....identified areas where oil posing a threat to navigable waters remains as submerged oil and/or in the flood plain (overbank)."
- b. In addition to or as a replacement for the existing paragraph, please provide clear and concise objectives for the SSWP.

5) Section 1.2:

- a. Please review and revise, if necessary, the locations and sequence of submerged oil areas to be addressed.
- b. In the first sentence, please replace "...oil remains." With "...heavy and moderate oil remains."
- c. Ensure all moderate submerged oil areas are reflected in Attachments A through E referenced in this section.

6) Section 2.0:

- a. First paragraph: please clarify that the referenced "property owner input" is limited to restoration activities, and not oil recovery methods.
- b. Please revise the status of the referenced *Turbidity Monitoring Work Plan* to reflect the submission/approval date.
- c. Second bullet of second bullet list: please replace "Air Water Injector..." with "Air and/or Water Injector..."

7) Section 3.0:

- a. Please define which river segments/mile posts are included in the "upper river" and "lower river" as these terms are used in the SSWP.
- b. Fourth set of bullets:
 - i. Second bullet: please replace "...agencies as an..." with "agencies at the Recovery Task Force meetings as an..."
 - ii. Third bullet: please identify the title of persons that will record the referenced coordinates.
- 8) Section 3.3: please provide the referenced "Submerged Oil and Submerged Oil Addendum Toolbox" as an addendum to the SSWP and ensure that it includes methods for measuring turbidity and water flow velocities.

9) Section 3.3.1:

- a. Please clarify what is meant by the "open face of the river channel."
- b. Please replace "floatation" with "flotation."
- c. Please replace "...with 12-inch skirting..." with "...with at least a 12-inch skirting..."
- d. Please replace "...along any shoreline areas..." with "along any shoreline and/or vegetated areas..."
- **10)** Section 3.3.2: Please provide the referenced *Submerged Oil Recovery Monitoring Plan* (as revised) as an addendum to the SSWP.

11) Section 3.4.3:

- a. Please replace the first bullet with the "Submerged Oil Recovery end points: the absence of sheen or presence of only light sheen during post-poling verification operations."
- b. Please replace the last sentence with "Target Areas that do not meet the defined end points will trigger continued oil recovery activities."

12) Section 3.4.3.1:

- a. Please replace 20 with 200.
- b. Second sentence: please replace "...locations will be selected by a fluvial geomorphologist" with "...locations shall be selected by a fluvial geomorphologist."
- c. Please add the following to the end of the second sentence "and shall include locations known to contain heavy and moderate submerged oil prior to oil recovery activities."
- d. Please replace the fourth sentence with "Results of the core logging process and photographs shall be used to aid in the evaluation of the effectiveness of submerged oil recovery actions."
- e. Please add a provision stating that the vertical extent of oil-containing sediments will be determined during the evaluation of sediment cores.
- 13) Section 4.0: please provide revised and updated schedules.

14) Section 4.1:

- a. Please specify when the hydrodynamic and oil mobilization risk evaluations will be performed and when the results will be submitted to the U.S. EPA.
- b. Please provide a mechanism for providing regular/periodic updates on the hydrodynamic and oil mobilization risk evaluations.
- c. Please provide a mechanism for providing updates on the hydrodynamic and oil mobilization risk evaluations if conditions change.
- **15**) Section 5.0, last sentence: Please specify a time period for reacting to new situations or change of conditions.

- **16**) Please modify the Standard Operating Procedure (SOP) for turbidity to include an action level of twice background or 50 Nephelometric Turbidity Units (NTU), whichever is greater. Please include the revised SOP as an attachment to the revised SSWP.
- 17) Please add a provision requiring continuous qualitative assessment for submerged oil at locations downstream of containment in the Morrow Lake Delta and in Morrow Lake.
- 18) Please add provisions for performing geomorphic mapping of deposition areas and conducting grain size analyses of sediments.

Comments specific to the DS are presented below.

- A) Please ensure that data reported in Table 1 are consistent with data in the text of the work plan, specifically ensure consistency with estimated dredge volumes.
- **B)** Please include a treatability study for the sediments at the dam/spillway near Mile Post (MP) 15.75 and in the Morrow Lake Delta.
- C) Please include a section entitled "Legacy Sites" and provide a detailed summary (including data, tables, figures, narrative and attachments, as necessary) review of potential impacts from legacy sites (i.e., PCBs) which may have affected contaminants present in the sediment.
- **D)** Please provide a reassessment plan, proceeding from upstream to downstream, which will be performed after sediment removal is performed.
- E) Section 1.0:
 - i. Please add other known significant submerged oil areas (including MP 19.25 and the oxbows) to the DS plan or provide justification for not including them.
 - ii. Please stipulate if the dredging efforts will be performed top down (i.e., upstream to downstream) or concurrent.
 - iii. Please change the first sentence in the second paragraph to read, "As it has been observed, it appears that submerged oil may continue to migrate and accumulate in the depositional areas."
 - iv. In the last sentence of the second paragraph, please include evaluation of an interim report and/or post-recovery data on submerged oil recovery effectiveness as one of the key considerations in deciding to dredge.
 - v. Please specify which contaminants will be evaluated in the dredging decision and how they will be considered.
- F) Section 1.1: Please define the process for identifying a lay down area for the dam/spillway near MP-15.75

- **G)** Section 1.1.1:
 - i. Please provide the estimated minimum and maximum cut depths, with technical justification, in the second and last sentences.
 - ii. Please specify the type of water treatment system that will be utilized.
 - iii. Coring and qualitative data shall be provided to justify actual dredge depths.
- **H)** Section 1.1.2: Please provide a conceptual plan for the dewatering pad and equipment lay down area with a description of how material will be transported from excavations.
- I) Table 1, Dredge Volume column: please deduct volumes not planned for dredging (i.e., addressed through "tool box methods") and remove the corresponding footnote.
- J) Section 1.2.1: Please remove the work precision when referring to cut depths.
- K) Section 1.4: Please replace "access" with "assess" in the third sentence.
- L) Section 1.5: Surface boom shall have a minimum skirt of 12 inches.
- M) Section 1.7
 - i. Please identify the source of clean water.
 - ii. Please stipulate that the water system is a Granular Activated Carbon (GAC) system.
- N) Section 1.9.1: Please revise the paragraph to begin with "General dredging schedules have been developed and are presented in Attachment E. Specific dredging schedules will....."
- O) Section 1.12: Please remove the last bullet.
- P) Section 1.13: Please state specifically what qualitative and quantitative data will be included in the assessment.
- **Q)** Section 1.15: Please add bathymetry data in Geographical Information System (GIS) format consistent with previous GIS deliverables to the list of contents of the Completion Report.
- **R)** Please clarify the number of Geotubes[®] to be delivered to each of the dredge sites.
- S) Please confirm that polymer feed pumps are adjusted based upon flow and density rather than percent solids.

T) All dredge spoils shall include waste characterization for disposal. The analytical suite shall be the same as listed in Section 2.4.1 with the addition of testing for PCBs.

The oil recovery operations shall be performed in accordance with all federal, state and local regulations. Undertaking activities directed by the U.S. EPA does not obviate the need for Enbridge to acquire all necessary permits and comply with other applicable regulatory requirements.

The revised plans in printed form shall be submitted to U.S. EPA no later than 1700 hours Eastern, July 30, 2011. The document shall also be concurrently submitted electronically in Microsoft Word format.

If you have any questions regarding this letter, please contact me immediately at (231) 301-0559.

Sincerely,

Ralph Dollhopf

Federal On-Scene Coordinator and Incident Commander

U.S. EPA, Region 5

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