

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

April 25, 2012

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

Re: Enbridge Energy, Limited Partnership's March 22, 2012 Letter

Dear Mr. Adams:

The United States Environmental Protection Agency (U.S. EPA) has received and reviewed Enbridge Energy, Limited Partnership's (Enbridge) letter dated March 22, 2012, in which Enbridge proposed a minimum 55⁰F temperature requirement for future reassessment activities. Previously, a minimum of 45⁰F (as recommended by Enbridge) was a prerequisite for assessment/reassessment of submerged oil activities to occur.

After evaluating your March 22, 2012 request and results presented by Enbridge in a report¹ documenting the effects of temperature on submerged oil, the U.S. EPA directs that Enbridge incorporate a **minimum water temperature of 60⁰F** as one of the conditions required to perform future submerged oil assessment via poling, or other methods which rely on the liberation of oil from sediment in U.S. EPA-approved work plans^{2,3,4}.

¹ *Enbridge Line 6B MP 608, Marshall, MI Pipeline Release, Report of Findings for Submerged Oil Temperature Effects Study, Prepared for United States Environmental Protection Agency, Enbridge Energy, Limited Partnership, Originally Submitted: February 20, 2012, Resubmitted: April 5, 2012*

² *Enbridge Line 6B MP 608, Marshall, MI Pipeline Release, Addendum to the Response Plan for Downstream Impacted Areas, August 2, 2010 (Revised August 17, 2010 per U.S. EPA August 17, 2010 letter), Supplement to Source Area Response Plan, and Supplement to Response Plan for Downstream Impacted Areas, Referred to as Operations and Maintenance Work Plan Commonly referred to as "Consolidated Work Plan from Fall 2011 through Fall 2012", Prepared for the United States Environmental Protection Agency by, Enbridge Energy, Limited Partnership, Submitted: October 20, 2011, Revised by the United States Environmental Protection Agency, November 17, 2011, Revised by Enbridge Energy, Limited Partnership, Submitted: December 4, 2011, Approved: December 21, 2011*

³ All U.S. EPA-approved work plans resulting from the *Consolidated Work Plan from Fall 2011 through Fall 2012*, referenced above.

⁴ *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, Resubmitted: July 30, 2011*

The limited range of temperatures (43⁰F to 60⁰F) examined at the Temperature Effects Monitoring Stations (TEMS) were at the low end of expected ambient conditions and, therefore, only allow confirmation of the inability of oil to be released by agitation at low temperatures. It does not support Enbridge's proposed minimum poling temperature of 55⁰F.

As indicated by the median values, the TEMS data show that the amount of liberated oil sheen and globules remained approximately constant for the three temperature intervals below 55⁰F (43.7⁰F - 45.0⁰F; 45.1⁰F - 50.0⁰F; and 50.1⁰F - 55.0⁰F), but the liberated amounts increased by a factor of approximately two in the final temperature interval of 55.1⁰F - 60.7⁰F. Thus, these data show a trend of increased liberated oil at temperatures above 55⁰F, and the TEMS results suggest that the minimum temperature to initiate poling should be above 55⁰F.

In addition to results of the TEMS and bench study, U.S. EPA observed during the week of March 19, 2012, that water temperatures above 60⁰F resulted in significant increases in liberating/floating of submerged oil, as compared to the significant decrease in liberated/raised oil observed when water temperatures were in the vicinity of 55⁰F during the week of March 26, 2012. This field observation confirms that a minimum temperature in excess of 55⁰F is required for the liberation/floating of submerged oil.

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

cc: L. Kirby-Miles, U.S. EPA, ORC
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