

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

March 7, 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 Required Assessment of Talmadge Creek and Kalamazoo River in response to the Administrative Order issued by U.S. EPA on July 27, 2010 and Supplement to the Administrative Order issued by U.S. EPA on September 23, 2010, pursuant to §311(c) of the Clean Water Act (Docket No. CWA 1321-5-10-001)**

Dear Mr. Adams:

The United States Environmental Protection Agency (U.S. EPA) directs 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") to perform assessment activities described herein. These directives are issued pursuant to the Administrative Order ("Order") issued by the U.S. EPA on July 27, 2010 and a Supplement to Order for Compliance Under Section 311(c) of the Clean Water Act issued ("Supplement") by the U.S. EPA on September 23, 2010.

Pursuant to Paragraph 6 (Item 18.k) of the Supplement, Enbridge shall submit a detailed work plan ("Plan") to the U.S. EPA for reassessment of the source area, Talmadge Creek, Kalamazoo River and downstream impacted areas for the presence of oil, sheen and/or oil/sheen that threaten navigable waterways. The Plan shall include, as a minimum, the components identified below.

1. Provisions and details for collecting aerial imagery data of areas affected or suspected to be affected by the spill to include the source area, Talmadge Creek, Kalamazoo River and associated downstream impacted areas. Enbridge shall use multiple remote sensing technologies, such as the ones described below. Enbridge may also propose remote sensing technologies, other than those identified below, that accomplish the desired results of accurate terrain mapping and identification of oil/submerged oil.
  - a) Polarimetric Imagery (PI) – Enhanced High Resolution Aerial Imagery. PI is an enhanced high definition video with still frame capture that uses sunlight and non-visible light to enhance the image.

- b) Light Detection and Ranging (LIDAR) to develop a Digital Elevation Model (DEM). LIDAR is a remote laser transmitting and sensing system used to collect topographic data. When used in combination with a high precision Global Position System (GPS), the data becomes spatially relevant. The end product is a DEM with contours accurate to six inches.
- c) Fluorescent LIDAR System (FLS). FLS is a laser emitting technology that detects a spectral fluorescent signature when reflected off contaminants such as crude oil. The crude oil is analyzed to determine its spectral fluorescent signature. When this pre-determined signature is detected on the surface of sediment or soil during aerial reconnaissance, it registers as a positive indication of crude oil. This technology identifies when crude oil is: 1) on the surface of soil or sediment; 2) in plants that have taken up the oil through root systems. Additionally, FLS may be able to identify when oil consuming organisms are present.

The purpose of the remote sensing imagery is to:

- Provide a basis for comparison with similar aerial imagery collected in August 2010 to compare changes within the work limits of the source area, Talmadge Creek, Kalamazoo River and adjacent areas (e.g., shorelines and downstream impacted areas).
  - Confirm topography and update the United States Geological Survey (USGS) Inundation model.
  - Use best available technology to detect remaining oil in submerged sediments, shorelines and in downstream impacted areas.
2. A detailed plan for using other methods (e.g., visual assessment/inspection, poling, coring, etc.) to evaluate aforementioned affected waterways (including sediment and soil), shorelines and downstream impacted areas.
  3. A proposed schedule for implementation of the Plan. The enhanced imaging shall be executed after snowmelt occurs and before Spring 2011 vegetation/leaf growth occurs. Given that implementation of the Plan will likely need to occur between mid-March and mid-April, 2011, time is of the essence.

Five copies of the Plan shall be submitted to U.S. EPA no later than 17:00 hours Eastern, March 14, 2011. The document shall also be concurrently submitted to U.S. EPA electronically in Microsoft Word format.

Once approved by the U.S. EPA, Enbridge shall implement the Plan's approved schedule.

If you have any questions regarding this directive, 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  
J. Cahn, U.S. EPA, ORC  
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