U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Enbridge Energy Partners, Ltd.,	)	**CPF No. 3-2010-5008H**
Respondent.	)	

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Enbridge Energy Partners, Ltd. (Enbridge or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's 30-inch diameter Line 6B hazardous liquid pipeline.

On July 26, 2010, a failure occurred on the Line 6B pipeline approximately one mile south of Marshall, Michigan, resulting in the release of crude oil. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the incident and the National Transportation Safety Board (NTSB) launched a failure investigation team to the incident location.

Preliminary Findings

- At approximately 9:45 a.m. CDT on July 26, 2010, Respondent discovered that a rupture occurred on its Line 6B hazardous liquid pipeline, resulting in the release of an estimated 19,500 barrels of crude oil. The failure occurred at Mile Post (MP) 608, approximately one mile south of the town of Marshall, Michigan. Marshall is located approximately half-way between the cities of Kalamazoo and Jackson, Michigan. The incident was reported to the National Response Center (NRC Report No. 948903).

- Spilled oil from Respondent's pipeline entered the Talmadge Creek and the Kalamazoo River. Emergency responders closed two nearby county roads. Various state and federal agencies including the Environmental Protection Agency, U.S. Coast Guard, and the Michigan Department of Environmental Quality are deploying boom and taking other response and collection measures. Spilled oil has migrated as far downriver as Augusta, Michigan.

- After discovering the failure, Respondent's personnel initiated an emergency shut-down of the pipeline. Respondent's personnel then isolated the line by closing the nearest upstream and nearest downstream block valves.

- The cause of the failure is unknown and the investigation is ongoing. The NTSB will take custody of the failed pipe section once it is excavated and transport it to a metallurgist for examination and failure analysis.

- The pipe in the affected segment was manufactured by Siderius in 1969 and is constructed of 30-inch x 0.250-inch wall thickness, grade X-52 submerged arc weld pipe. It has a Polyken tape coating and an impressed current cathodic protection system.

- At the time of the incident, the estimated operating pressure at the failure site was 425 psig. The maximum operating pressure (MOP) of this line segment is 624 psig and the Marshall Station discharge set point was 523 psig.

- Respondent's Line 6B originates in Griffith, Indiana and runs eastward to Sarnia, Ontario. The U.S. portion is approximately 286 miles in length. Portions of the pipeline are located in High Consequence Areas (HCAs). The line crosses numerous state and local highways.

- Line 6B was last re-assessed for corrosion in June, 2009 with Ultrasonic Technology and prior to that in October, 2007 with Magnetic Flux Leakage technology. On July 15, 2010 Respondent notified PHMSA of an alternative remediation plan for metal loss anomalies found in this survey to consider pipe replacement instead of repair. Enbridge further notified PHMSA that the alternative remediation method would result in exceeding the allowable timeframe to complete remediation.

Determination of Necessity for Corrective Action Order and Right to Hearing

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above referenced statute and 49 C.F.R. §190.233, a copy of which is enclosed.

Section 60112, and the regulations promulgated thereunder, provide for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will result in likely serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of the Respondent's Line 6B pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, circumstances surrounding this failure, the proximity of the pipeline to populated areas, public roadways and

high consequence areas, the hazardous nature of the product the pipeline transports, the pressure required for transporting the material, the uncertainties as to the cause of the failure, and the ongoing investigation to determine the cause of the failure, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment. Accordingly, this Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held in Kansas City, Missouri or Washington, D.C. on a date that is mutually convenient to PHMSA and Respondent.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Action

Pursuant to 49 U.S.C. § 60112, I hereby order Enbridge Energy Partners, Ltd. to immediately take the following corrective actions with respect to Line 6B:

1. Prior to resuming operation of the section of Line 6B pipeline segment running from the Marshall Station to the Stockbridge Station, develop and submit a written restart plan for prior approval of the Director, Central Region, OPS, Pipeline and Hazardous Materials Safety Administration, 901 Locust Street, Suite 462, Kansas City, MO 64106-2641.

2. The restart plan must provide for adequate patrolling of the pipeline segment during the restart process and must include:

    A. Exposure of the pipeline extending 50 feet on either side of the failed pipe joint to examine for corrosion, coating condition, or other issues. Expose further pipe as needed. Repair or replace pipe or coating as necessary in accordance with 49 C.F.R. Part 195. Upon completion of pipe replacement and repairs, ensure proper backfill and protection from stones and rocks;

    B. Verify adequate cathodic protection for the area where the failure occurred. Once backfill and land settling has occurred, ensure pipe-to-soil readings are within applicable criteria; and

    C. Perform incremental start-up in 25% pressure increments with each increment to be held for at least one hour. Include sufficient surveillance on each increment to ensure that no leaks are present when operation of the line is resumed.

    The restart plan must specify a daylight restart and detail advance communications with local emergency response officials. Obtain written approval to resume operation of the line from the Regional Director prior to resuming operation.

3. After receiving approval from the Regional Director to restart the pipeline, maintain a twenty percent (20%) pressure reduction in the operating pressure of Line 6B. The operating pressure of Line 6B is not to exceed eighty percent (80%) of the operating pressure in effect immediately prior to the failure. Specifically, the pressure in the Marshall Station discharge segment is not to exceed 340 psig. Enbridge must reset the station discharge set points for all other stations on Line 6B not to exceed 80% of the discharge pressures in effect at the time of the failure. This pressure restriction will remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Regional Director pursuant to Item 11.

4. Transfer custody of the failed pipe to the NTSB for mechanical and metallurgical testing and failure analysis, including analysis of soil samples and any foreign materials. The mechanical and metallurgical testing protocols shall be determined by the NTSB in consultation with PHMSA.

5. Within 60 days following receipt of this order, submit an integrity verification and remedial work plan to the Regional Director for approval. The plan must provide for the verification of the integrity of the pipeline and must address all factors known or suspected in the July 26, 2010 failure. The plan must include:

   A. Integrate the results of the metallurgical analysis performed pursuant to Item 4 with all relevant operating data in analyzing the July 26, 2010 failure;

   B. Review the failure history of the entire U.S. portion of Line 6B over the past 20 years and develop a written report containing all available information on the locations of failures, dates of failures, and cause of failures and describing your plans to confirm that the remainder of the line is not susceptible to more such failures. Make the report available to the Regional Director.

   C. Evaluate the remainder of Line 6B to determine whether the condition(s) involved in the July 26, 2010 failure, or any other integrity threatening condition(s), are present. The evaluation methods used must be technologically appropriate for assessing the pipeline based on the type of failure that occurred on July 26, 2010 and should include consideration of pressure testing and/or additional in-line inspections supplemented by complimentary direct assessment as appropriate;

   D. Include a detailed description of the inspection and repair criteria to be used in the field evaluation of any anomalies that are excavated. This is to include a description of how any defects are to be graded and the schedule for repairs or replacement;

   E. Include provisions for continuing long-term periodic testing and integrity verification measures to ensure the ongoing safe operation of the affected segment considering the results of the analyses, inspections, and corrective measures undertaken pursuant to this Order;

   F. Include a proposed schedule for completion of the actions required by paragraphs A-E of this Item.

6. Upon approval by the Regional Director, the integrity verification and remedial work plan becomes incorporated into this Order and shall be revised as necessary to incorporate the results of actions undertaken pursuant to this Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities. Submit any such plan revisions to the Regional Director for prior approval. The Regional Director may approve plan elements incrementally.

7. Implement the work plan as it is approved by the Regional Director, including any revisions to the plan.

8. Submit quarterly reports to the Regional Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report for the period from July 26, 2010 through October 31, 2010 shall be due by November 30, 2010.

9. Maintain documentation of the costs associated with implementation of this Corrective Action Order. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

10. With respect to each submission that under this Order requires the approval of the Regional Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Regional Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Regional Director disapproves all or any portion of the submission, Respondent shall correct all deficiencies within the time specified by the Regional Director, and resubmit it for approval.

11. The Regional Director may allow the removal or modification of the pressure restriction set forth in Item 3 upon a written request from Respondent demonstrating that the hazard has been abated and that restoring the pipeline to its pre-failure operating pressure or established MOP is justified based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.

The Regional Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101 et seq., or under any other provision of Federal or State law.

Respondent may appeal any decision of the Regional Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

The terms and conditions of this Corrective Action Order are effective upon receipt.

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

JUL 28 2010

Date Issued