

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED CIVIL PENALTY**

UPS NEXT DAY AIR

August 27, 2012

Mr. Richard Adams
Vice President, U.S. Field Operations
Enbridge Energy, Limited Partnership
City Center Office
1409 Hammond Avenue
Superior, Wisconsin 54880-5247

CPF 3-2012-5018

Dear Mr. Adams:

Beginning on May 22, 2009, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code investigated a May 21, 2009, crude oil release from Enbridge Energy, Limited Partnership's Line 61 Pig Sending Trap, in Superior, Wisconsin. The accident resulted in the release of 154 bbls of crude oil, removal of approximately 700 cubic yards of contaminated soil, and reported costs of \$117,257.

As a result of the investigation, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violation(s) are:

1. **§ 195.52 Immediate notice of certain accidents.**
 - (a) **Notice requirements. At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in § 195.50, the operator of the system must give notice, in accordance with paragraph (b) of this section, of any failure that:**
 - (1) **Caused a death or a personal injury requiring hospitalization;**
 - (2) **Resulted in either a fire or explosion not intentionally set by the operator;**

- (3) Caused estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000;**
- (4) Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines; or**
- (5) In the judgment of the operator was significant even though it did not meet the criteria of any other paragraph of this section.**

Enbridge failed to provide notice of a crude oil release meeting immediate notification requirements at the earliest practicable moment following discovery. On May 21, 2009, at approximately 15:35 CDT (all times are CDT unless otherwise noted) Enbridge Energy, Limited Partnership (Enbridge) experienced a release of crude oil from the Line 61 Pig Sending Trap Sump at the Superior Terminal. The release occurred while Enbridge personnel were testing valve operation associated with Line 61 Station Isolation and De-isolation commands, and was discovered almost immediately when the Enbridge Superior Area Electrical Technician involved with the testing saw oil on the ground. Enbridge did not provide notification to the National Response Center (NRC) until 18:32 (Report # 906291), almost 3 hours after the release was discovered.

NRC Report # 906291 was provided by Enbridge's Superior Region Manager at 18:32. The report indicated a release of 98 barrels (bbls) of crude oil to a Retention Pond at the Superior Terminal due to Operator Error. The report stated that a valve was left open causing the release, and the oil travelled approximately 300 feet to the retention pond, which is meant specifically for collecting released oil.

Information provided by Enbridge, including an Incident Investigation Report, Control Centre Operational Incident Report, SCADA Alarms and Commands, and various e-mails demonstrate the sump filled rapidly once the station de-isolation command was issued by the Line 61 controller (15:30). A Sump High-High Alarm occurred at 15:33 and was acknowledged by the Line 61 controller 12 seconds later. Enbridge stated that the Superior Area Electrical Technician that was assisting with the testing witnessed the valve movement on the computer screen in the control building, and then went to the Pig Sending Trap area and discovered the release. SCADA indicates the Line 61 Sending Trap Outlet Valve was in travel closed at 15:35, and since this was not a command issued by the Line 61 controller, it is assumed this valve closure was initiated by the Superior Area Electrical Technician when he discovered the release. According to SCADA information, the Line 61 controller executed the station isolation command at approximately 15:45. SCADA also indicates that the Line 61 Trap Sump Pump was running at 15:54.

Information reported by Enbridge on PHMSA Form 7000-1 indicates the total amount of product released was 154 bbls, with 140 bbls recovered. Approximately 700 yards of contaminated soil were removed, and total costs associated with the accident are reported to be \$117,257.

2. **§195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

Enbridge failed to follow established written procedures for Lock Out/Tag Out (LOTO) of equipment. The procedures have been established to control hazardous energy from various sources, including valves, by providing protection from unauthorized operation. In this instance, valves associated with Enbridge's Line 61 Pig Sending Trap were locked out by Pipeline Maintenance (PLM) personnel, but no LOTO Log had been completed, and no Pressure Piping Isolation (Valve Positioning) Form was completed, as required by the procedure. The locks were subsequently removed by the Superior Area Electrical Technician following a telephone discussion with the PLM Team Lead, but the technician was unaware that the trap vent valve had been left in the open position to provide thermal pressure relief for the sending trap piping. When the Edmonton Control Center (CCO) Line 61 controller issued a Station De-isolation command, crude oil flooded the trap, drained through the open vent valve, and overflowed the trap sump, resulting in the release of 154 bbls of crude oil.

The results of Enbridge's internal investigation into the accident indicate a number of root causes contributed to the accident. Through follow-up e-mail discussions with Enbridge representatives concerning the circumstances of the accident, and as indicated by Enbridge's Supplemental/Final Form 7000-1 Report, the root cause of the accident was failure of personnel to follow the established written procedures.

Enbridge provided the written procedures that were in effect at the time of the accident as well as blank copies of the Lock Out/Tag Out Form (LOTO) and the Pressure Piping Isolation (Valve Positioning) Form. As the circumstances associated with the accident were discussed over an extended time, primarily through e-mailed questions and responses, Enbridge steadfastly maintained that the root cause of the accident was failure to follow the LOTO procedures correctly.

3. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted. **(d) Abnormal operation.** The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;

(d) (1) Responding to, investigating, and correcting the cause of;

(i)

(ii)

(iii)

(iv) Operation of any safety device;

(v) Any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property.

Enbridge failed to establish adequate procedures for responding to deviations from normal operation. Specifically, Enbridge's procedures for responding to a Sump Level High-High alarm for the Line 61 Pig Sending Trap Sump were inadequate because they did not require any specific corrective action to be taken by the Control Center Operator (CCO) due to the alarm being established as an S4 Severity Level (Warning).

The SCADA Alarm and Command Logs provided by Enbridge indicate the Trap Sump Level High-High alarm (S4 Severity Level) occurred at 15:33; approximately 3-1/2 minutes after the Line 61 controller issued the Station De-isolation command. The alarm was acknowledged by the Line 61 controller within 12 seconds, but the Station Isolation command was not issued until approximately 11 minutes later, when the CCO was informed by local operating personnel there was oil on the ground in the area of the Line 61 Sending Trap Sump.

Enbridge has explained that the S4 Severity Level originally established for the Trap Sump Level High-High Detected alarm required; 1) Discretionary Operator response to alarm dependent on operating conditions, and 2) Advise on-site/on-call personnel if required. This lack of a definitive procedure for responding to, investigating, and correcting the cause of the alarm was initially described as a "commissioning issue" in the Control Centre Operational Incident Report, which indicated that the alarm had been changed to an S6 Severity Level (Severe) on May 25, 2009. Enbridge subsequently indicated the procedures have been further revised, such that the same alarm is now an S8 Severity Level (Critical), and requires the CCO to; 1) Shut down the line, 2) Shut down the Station, and 3) Contact station personnel or on-call immediately.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$100,000 for each violation for each day the violation persists up to a maximum of \$1,000,000 for any related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$118,700 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$18,700
2	\$100,000

Warning Item

With respect to item 3 we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 3-2012-5018** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

David Barrett
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*