U.S. Department
of Transportation
**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

NOTICE OF PROBABLE VIOLATION
and
PROPOSED CIVIL PENALTY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 27, 2010

Mr. T. Hurlburt,
TE Products Pipeline Company, LLC
Sr. Vice President Operations
1100 Louisiana St.
Houston, Texas 77002-5227

CPF 4-2010-5015

Dear Mr. Hurlburt:

In May 2009 representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code conducted an on-site investigation of a TE Products Pipeline Company, LLC (TEPPCO) accident that occurred at the McRae Product Terminal on May 12, 2009 near Garner, Arkansas. The accident involved the explosion of an out-of-service breakout tank (Tank 1303) located in the terminal that occurred during TEPPCO's execution of a Gauge Pole Installation project. Hazardous vapors were ignited by a welder cutting the internal floating roof using a flame cutter. The accident resulted in three fatalities. Enterprise Products Company (EPCO) is the parent company of several pipelines including TE Products Pipeline Company, LLC (TEPPCO). EPCO has prepared standards and procedures that are used by these pipelines and are referenced in this NOPV.

As a result of this investigation, it appears that you have committed probable violation of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the

probable violations are:

1. **§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.

TEPPCO did not follow its procedures and ensure that the tank was cleaned and gas free as there was residual product in the tank that ultimately exploded during the tank gage installation work. Operators are required to establish a set of procedures for performing maintenance or repair activities. These procedures are incorporated into their Operations and Maintenance (O&M) manuals or in some cases specifically created for the project. TEPPCO utilizes written procedures to provide safety when conducting work in a facility. These procedures are described in EPCO Procedure 6.2, Job Planning Process.

Before the Tank 1303 Gauge Pole Installation Project at the McRae Product Terminal near Garner, Arkansas on May 12, 2009, TEPPCO did not follow its Job Planning Process procedure "to prevent accidents, and injuries and losses during non-routine work through a detailed and effective job planning process" when it failed to ensure that Tank 1303 was completely free of hazardous vapors.

Based on the findings of the investigation OPS believes that if TEPPCO had followed the job planning process prior to the Tank 1303 Gauge Pole Installation Project, the accident on May 12, 2009 that resulted in three fatalities may have been prevented.

The job plan for tank work at McRae Terminal involved various steps to complete the project: Each step is performed by either TEPPCO or contractor personnel. While taking these steps pipeline operators may make arrangements with other entities for the performance of actions on their pipeline facilities, but the operator is ultimately responsible for the safe operation of work performed on their pipeline facility. Some of the steps include: isolating the tank from operations, cleaning the tank, and installing the gage pole.

The first step of isolating the tank from operations was performed by TEPPCO. Isolation was verified in a walkdown performed by TEPPCO, Veolia and C& C employees. Completion of this task was recorded in form – Isolation/Blind List.

The second step, cleaning the tank to make it safe for hot work, was contracted out by TEPPCO but the step was incomplete in that only the floor was cleaned and not the entire tank. Veolia Environmental was contracted by TEPPCO to clean the tank per EPCO-SF20 "Job Plan Clean Tank 1303". The contract dated May 2, 2009 describes the work to be performed by Veolia as: vacuum all sludge out of Tank #1303, wash and dry the floor and transport all removed material to ASI in Little Rock, Arkansas for disposal. The work performed by Veolia is described in a document dictated by the Veolia supervisor and submitted to PHMSA.

Other documentation also describes Veolia's scope of work as "Clean Interior Floor". These documents include the EPCO-SF33, Daily TailGate Safety Meeting Documentation, Hot Work Permit, Confined Space Entry Permit, EPCO-SF33 that were issued for 12/08/2010 and 12/09/2010. Service Request Forms were used to document the work performed including the removal and shipment of the material for disposal.

TEPPCO approved Veolia's work when its representatives 'signed off' on the various permits and the Service Request forms each day.

The third step was to be performed by C&C Welding. This step also involved hot work since metal was to be cut with a flame cutter. Knowing that hot work was going to be performed inside the tank TEPPCO should have ensured that the tank was totally safe for this work to be performed prior to allowing the next step of the project to take place.

Based on the observations, calculations, and forensic evidence, BakerRisk, a consultant hired to investigate the accident, concluded that the TEPPCO McRae Tank 1303 accident was probably caused by deflagration of a flammable gasoline/air mixture inside the floating roof pontoons, created by leakage of gasoline vapors into the pontoons.

By not cleaning and checking the entire tank, including the pontoons, TEPPCO did not follow its procedures and ensure that the tank was cleaned and gas free as there was residual product in the tank that ultimately exploded during the tank gage installation work.

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.

TEPPCO did not follow its procedures and ensure that the atmosphere inside of the tank was monitored. Operators are required to establish a set of procedures for performing maintenance or repair activities. These procedures are incorporated into their Operations and Maintenance (O&M) manuals or in some cases specifically created for the project. TEPPCO utilizes written procedures for conducting work in a facility. During the Tank 1303 Gauge Pole Installation Project at the McRae Product Terminal near Garner, Arkansas on May 12, 2009, TEPPCO did not ensure the applicable procedures were followed. Based on the investigation it appears that if TEPPCO had ensured that these procedures were followed during the Tank 1303 Gauge Pole Installation Project, the accident on May 12, 2009 that resulted in three fatalities may have been prevented

The tank work at McRae Terminal involved various steps to complete the project. Each step is performed by either TEPPCO or contractor personnel. Pipeline Operators may make arrangements with other entities for the performance of actions on their pipeline facilities, but the operator is ultimately responsible for the safe operation of work performed on their pipeline facility. Some of the steps include: Isolating the tank from operations, cleaning the tank, and installing the gage pole.

C&C Welding was contracted to install the gage pole per EPCO SF-20 "Job Plan Install Gauge Pole on Tank 1303". The plan details step by step procedures that must be followed. TEPPCO planned to take steps to make Tank 1303 safe for C&C Welding by isolating Tank 1303 from energy sources through TEPPCO's Lock-Out-Tag-Out processes, having Veolia Environmental Services clean Tank 1303 and by requiring that the work area in the tank be continuously monitored for a hazardous atmosphere.

Additionally for this project, TEPPCO identified the tank as a Confined Space. As such, EPCO's procedure EH&S 3.8 Permit Required Confined Space Entry is required. Contained in Section 3.8.1 "Entry Requirements" are safety requirements. Included in this section and in the actual Permit dated 05/12 is the requirement for initial and continuous monitoring of the atmosphere of the confined space. This document specifies the safety work requirements for the project. This document also makes reference to other EPCO's procedures like: EPCO-SF48 (Isolate Blind Flange), EPCO –SF06 (Confined Space Rescue Plan Form and EPOLOP-SF27 (Post Permit Required Confined Space Entry Debrief). These other forms are used to provide specific instructions for various specific tasks required during the project.

Prior to start of the Tank 1303 Gauge Pole Installation Project work, a Tailgate meeting was held and documented (EPCO-SF33) on May 12, 2009. During the meeting, the Job Plan (EPCO-SF20) was reviewed and distributed to C&C Welding. The five C&C Welding and TEPPCO

personnel involved in the project signed off on the documentation. In the EPCO-SF20 form it requires:

> "NOTE The atmosphere inside the tank above and below the floating roof, inside all pontoons and the drain dry sump underground pipe will checked (LEL and O2) prior to entry and will be continuously monitored when anyone is inside the tank?"

Documentation that was reviewed (Form EPC-0041) indicated that the atmosphere in the tank was tested at 7:00 am prior to the start of work. This form also requires that the monitoring frequency be indicated and recorded on the form. It was indicated as continuous but it was not followed. It is uncertain as to the specific locations that were tested and no other monitoring took place or was documented prior to the explosion at 2:17 pm. The investigation revealed that the monitoring devices were in a truck instead of monitoring the atmosphere in the tank. There was no monitoring equipment found in the explosion debris indicating that none were in the tank at the time of the explosion.

Based on the observations, calculations, and forensic evidence, BakerRisk, a consultant hired to investigate the accident, concluded that the TEPPCO McRae Tank 1303 accident was probably caused by deflagration of a flammable gasoline/air mixture inside the floating roof pontoons, created by leakage of gasoline vapors into the pontoons.

TEPPCO did not follow its procedures and ensure that the atmosphere inside of the tank was monitored and as a result the tank ultimately exploded during the tank gage installation work.

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 $ 200,000 as follows:

Item number	PENALTY
1	$ 100,000
2	$ 100,000

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 4-2010-5015** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

R. M. Seeley
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

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