



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 S. Gessner, Suite 630
Houston, TX 77074

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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 2, 2017

Bacon Graham
Executive Vice President
Enterprise Products Operating
1100 Louisiana Street
Houston Texas 77002

CPF 4-2017-5035

Dear Mr. Graham:

On January 9 2017 through May 24 2017, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected Enterprise Products Operating LLC (Enterprise) procedures for Operations and maintenance were inspected in Houston, Texas.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. **§195.507– Record Keeping**

Each operator shall maintain records that demonstrate compliance with this subpart.

(a) Qualification records shall include:

(3) Dates of current qualification;

(b) Records supporting an individual’s current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

A review of Appendix H of Enterprise’s Operator Qualification plan(OQ) revealed that three of the OQ reports listed there do show that current qualification records for individuals performing those covered tasks under the mutual assistance requirements of the plan were not on record. The affected OQ records are for Koch Pipeline (last reviewed on 06/27/2011), Conoco Phillips (last reviewed on 05/10/2011) and Energy Transfer (Lone Star NGL last reviewed on 7/28/2011). Section 4 of the OQ plan under the subtitle of “Covered Tasks” states that at a minimum the established reevaluation frequency will not exceed 5 years. Hence the listed OQ records above all expired in 2016 (Koch- 06/27/2016, Conoco Phillips- 05/10/2016, Energy Transfer – 07/28/2016) and no requalification records had been obtained at the time of this inspection.

2. **§195.575-Which facilities must I electrically isolate and what inspection tests, and Safeguards are required?**

(e) If a pipeline is in close proximity to electrical transmission power footings, ground cables, or counterpoise or in other areas where it is reasonable to foresee fault currents or an unusual risk of lightning, you must protect the pipeline against damage from fault currents or lightning and take protective measures at insulating devices.

Enterprise’s Chaparral Line is in close proximity to electrical transmission power lines for a considerable length of miles between Mont Belvieu and Bryan TX, but is not protected from the risk of damage from the effects of fault currents or lightning even when Enterprise’s Standard 7006 in section 1.2 references NACE SP0177 (Mitigation of Alternating Current and Lightning Effects on Metallic Structures and Corrosion Control Systems) as the primary reference to be utilized in determining the protective measure to be taken and implemented.

Enterprise did not provide any record that showed the line was protected from the effects of the usual risk of fault currents or lightning.

Enterprise representatives stated during a meeting with PHMSA on August 16, 2017 that there was no protection for this line from lightning or fault currents and as such did not have any records to provide. They also stated that no engineering analysis had been carried out to determine the effects of the fault currents or lightning on the pipeline at the location.

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 system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.**

Enterprise Products Operating, LLC failed to update its procedure for “close interval potential survey specification” – CP 05 to ensure it was effective for all close interval potential surveys even after realizing from survey records in 2015 that the procedure was the source of errors in measurements taken while carrying out a close interval survey on the Chaparral pipeline system.

Enterprise representatives stated during a meeting on August 16, 2017 with PHMSA that results from a close interval survey on the portion of the Chaparral pipeline between Mont Belvieu and Bryan Texas carried out in February through March of 2015 included errors and resulted in elevated AC measurements which could be attributed to the #32-gauge wire which was run underneath high voltage power lines. A follow up survey conducted on July 30, 2015 showed some of the readings being much lower than initially taken at those locations. Enterprise’s personnel stated that this error could be directly attributed to the procedure and proffered to make the required changes to the procedure to avoid any such errors to the survey readings in the future. A copy of the corrected procedure was submitted to PHMSA on September 12, 2017 and reflected the changes made on August 24, 2017.

Enterprise products operating, LLC failed to make the required update to its procedure for over 2 years even when they were aware of needed update and carried out other surveys using the same procedure.

4. §195.452 – Pipeline Integrity Management in high consequence areas

(b) Each operator of a pipeline covered by this section must:

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline in the first column of the following table not later than the date in the second column:

(4) Include in the program a framework that-

(ii) Initially indicates how decisions will be made to implement each element.

(5) Implement and follow the program

Enterprise Products Operating LLC failed to follow its Line Pipe Risk Analysis procedure (IM Procedure 2-01L) developed as part of its Integrity Management Program to address risks on its Pipeline systems and in this particular case the Maljamar to Maljamar Launcher segment. Records for the Information Analysis carried out on December 4, 2014 includes information from the risk assessment completed for this line segment and incorporated as part of the information analyzed in the report which shows a high probability risk score of 10 out of a total score of 10 for the threat of Stress Corrosion Cracking (SCC). The report attributed the excessively high score to the lack of available information on the coating type on the line segment thereby allowing for a misguided review from the reviewing personnel. However, a review of records for Coating and CP source provided by Enterprise during the screening exercise showed that the information on the coating type for this Line segment was available and showed it to be Coal Tar Enamel which if properly entered in the risk assessment would have allowed for the analyst to consider the score and be properly guided in evaluating the condition of the line at the time.

The IM procedure 2-01L in section 2-01.2.2 requires the Pipeline Integrity Engineer to be responsible for the collection of this data from about 12 sources and provides for the validation of the Risk analysis results and data inputted to ensure that the process works well.

Information Analysis carried out on December 4, 2014 for the Maljamar to Maljamar Launcher segment includes the record of the risk assessment for the threat of Stress Corrosion Cracking with a probability score of 10 out of a total of 10 and the note stating the coating type was unknown allowing for a misguided review from the analyst reviewing the information

5. §195.589 – What corrosion control information do I have to maintain

(C) You must maintain a record of each analysis, check, demonstration, examination, inspection, investigation, review, survey, and test required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that corrosion requiring control measures does not exist. You must retain these records for at least 5 years, except that records related to 195.569, 195.573(a) and (b) and 195.579(b)(3) and (c) must be retained for as long as the pipeline remains in service.

Enterprise Products Operating LLC's corrosion control records for the section of the Chaparral line between Conroe and Mont Belvieu in Texas lacks sufficient details to demonstrate the adequacy of the corrosion control measures in place. A comparison of the close interval survey records conducted on March 12, 2015, with records of AC readings on the remedial action form from July 23, 2015 and the survey report from May 26, 2017 (specifically intended to capture readings from locations with high readings on the CIS survey but still no readings were taken at the required locations) in addition to previous annual survey records from 2015 through 2017 (scarcely has any AC readings even at the locations with the high readings from the 2015 CIS survey) does present a number of questions concerning the adequacy of the corrosion control measures in place.

During a meeting with Enterprise personnel on August 16, 2017 representatives from Enterprise tried to clarify some of questions posed in these records. Sufficient detail in the records would explain how high AC readings (attributed to errors from the #32-gauge wire and the procedure utilized for the survey) dropped so low without any remediation to the readings recorded on July 23, 201. Also there were no other readings from 3 years of survey at same locations to compare and make a determination of adequacy of the corrosion control measures in place for the protection of the pipeline and safety of personnel carrying out the surveys / testing's. Without the meeting with Enterprise's personnel for clarification, the records independently raise questions on the adequacy of the corrosion control measures in place.

Proposed Civil Penalty

As of April 27, 2017, under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$209,002 per violation per day the violation persists up to a maximum of \$2,090,022 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of \$69,700 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$33,500
2	\$36,200

Warning Items

With respect to items 3,4 and 5, 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. We advise you to promptly correct these items. Failure to do so may result in additional enforcement action.

Proposed Compliance Order

With respect to item 1 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Enterprise Products Operating, LLC. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

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. All material submit in response to this enforcement action may be 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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from the receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 4-2017-5035** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Frank Causey
Acting Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

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

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Enterprise Products Operating, LLC a Compliance Order incorporating the following remedial requirements to ensure the compliance of Enterprise Products Operating, LLC with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to the mutual assistance program and the requirements for reviewing and maintaining qualification records and program reviews contained within, Enterprise Products Operating, LLC shall revise the process to ensure that all personnel carrying out covered tasks under the mutual assistance program are qualified and records showing current qualifications are maintained.
2. Item 1 shall be submitted to PHMSA no later than 30 days from the issuance of the Final Order in this case.
3. It is requested (not mandated) that Enterprise Products Operating, LLC maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Terri Binns, Acting Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.