August 8, 2019

Mr. A.J. Teague
Chief Executive Officer
Enterprise Products Partners, LP
1100 Louisiana Street, 10th Floor
Houston, Texas 77002

Re: CPF No. 4-2018-5009

Dear Mr. Teague:

Enclosed please find the Final Order issued in the above-referenced case. It makes a finding of violation and specifies actions that need to be taken by Enterprise Products Operating, LLC, a wholly-owned subsidiary of Enterprise Products Partners, LP, to comply with the pipeline safety regulations. When the terms of the compliance order have been completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Final Order by certified mail is effective upon the date of mailing, as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Mary McDaniel, Director, Southwest Region, Office of Pipeline Safety, PHMSA
Mr. Graham W. Bacon, Executive Vice President, Operations and Engineering, Enterprise Products Partners, LP
Ms. Brianne K. Kurdock, Babst Calland Clements and Zonmir, PC, Counsel for Enterprise Products Operating, LLC, 505 9th Street NW, Suite 700, Washington, DC 20004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
In the Matter of

Enterprise Products Operating, LLC,
a subsidiary of Enterprise Products Partners, LP,

Respondent.

CPF No. 4-2018-5009

FINAL ORDER

From January 9 through May 24, 2017, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Enterprise Products Operating, LLC (EPO or Respondent), in Houston, Texas. EPO is a wholly-owned subsidiary of Enterprise Partners, LP. (Enterprise).1 Enterprise conducts substantially all of its operations through EPO, including approximately 50,000 miles of pipeline and 260 million barrels of hazardous liquid storage capacity.2

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated May 3, 2018, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that EPO had violated 49 C.F.R. § 195.575(e) and proposed ordering Respondent to take certain measures to correct the alleged violation.

EPO responded to the Notice by letter dated June 7, 2018 (Response). The company contested the allegation, offered additional information in response to the Notice, and provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.


FINDING OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

**Item 1:** The Notice alleged that Respondent violated 49 C.F.R. § 195.575(e), which states:

§ 195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?
   (e) If a pipeline is in close proximity to electrical transmission tower 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.

The Notice alleged that Respondent violated 49 C.F.R. § 195.575(e) by failing to evaluate the potential threat of fault currents and lightning on one of the company’s pipeline systems. Specifically, the Notice alleged that the Chaparral pipeline system was observed to be in close proximity to high voltage electrical transmission power lines (HVPLs) for “a considerable length of miles between Mont Belvieu and Bryan, Texas.” EPO failed to provide any records demonstrating that the Chaparral system was protected from damage. Additionally, EPO stated to OPS inspectors that no fault analysis or engineering analysis had been performed on the Chaparral line to evaluate the potential for damage from fault currents and lightning.3

In its Response, EPO did not contest that its actions constituted a violation of Part 195, but argued that PHMSA should have cited the company for a violation of 49 C.F.R. § 195.402(c)(3), rather than § 195.575(e). Respondent raised four interrelated arguments against the proposed violation: (1) OPS did not prove that the Chaparral line was in close proximity to an HVPL; (2) an analysis of potential fault current or lightning damage was not required by § 195.575(e); (3) EPO’s pre-PHMSA inspection maintenance activities and records reviews demonstrated that the pipeline did not require protective measures against damage from fault currents or lightning; and (4) EPO’s post-PHMSA inspection soil-resistivity measurements further demonstrated that the pipeline did not require protective measures against damage from fault currents or lightning.

With respect to EPO’s first argument, the company argues that PHMSA has never explained what constitutes “close proximity” under § 195.575(e); it also argues that PHMSA offered “no evidence of the distance between the Chaparral line and the HVPL.”4 Both Respondent and OPS cite to a 1998 PHMSA interpretation of 49 C.F.R. § 192.467(f), a substantively-identical regulation applicable to operators of natural gas pipelines.5 In that interpretation, PHMSA stated, in relevant part: “‘close proximity’ means near enough to the listed structures to reasonably expect that a lightning strike or fault current involving the structure might harm the pipeline's corrosion control system. Close proximity is not an absolute or minimum distance,

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3 Pipeline Safety Violation Report, at 4 (May 3, 2018) (VR), on file with PHMSA.
4 Response of Enterprise Products Operating, LLC (Response), at 4 (June 7, 2018).
and it could vary depending on site conditions.” In the instant case, OPS made a factual determination that the Chaparral line was in close proximity to an HVPL “for a considerable length of miles.”

Respondent cites a PHMSA enforcement case, In the matter of Golden Pass Pipeline, LLC (Golden Pass), to suggest that factual statements made by OPS in the Notice and the VR must be corroborated with additional evidence to overcome an operator’s statements to the contrary. In Golden Pass, the alleged violation was withdrawn because OPS did not offer any additional evidence (e.g., photographs or maps) to support its interpretation of a definition in an industry standard. Respondent recognizes that “close proximity” is not defined in terms of “an absolute or minimal distance,” and offers no evidence to contest OPS’ factual assertion that the pipeline was in close proximity to an HVPL. Given the lack of evidence countering OPS’ credible factual statement, and both parties’ reliance on PHMSA’s analogous interpretation of § 192.467(f), Respondent’s argument that OPS was required to demonstrate some specific set of additional facts in order to sustain a violation of § 195.575(e) is without merit.

I also note that both parties cite to a 2017 PHMSA Notice of Amendment, In the Matter of Williams Olefins Feedstock Pipelines, LLC (Williams), for the proposition that an operator must first evaluate “when protection against damage from fault currents or lightning is needed” in order to determine whether action is required to comply with § 195.575(e). Exhibit A to EPO’s Response, Enterprise’s Procedure CPP-GEN-06, specifies that pipelines “located within or near HVPL corridors may be at risk” of fault current or lightning damage, and that HVPLs “collocated in the same [right-of-way] ROW or in close proximity to a pipeline” may cause damage. Exhibit P contains photographs of HVPL tower footings that Respondent describes as collocated with the Chaparral line. In the Response, EPO lists a variety of records and data that it reviewed to determine whether the line was subject to potential damage from fault currents and

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6 Id.

7 In the matter of Golden Pass Pipeline, LLC, CPF 4-2008-1017 (DOT Mar. 22, 2011) (withdrawing an alleged violation after finding that OPS “did not provide any evidence . . . beyond the facts and statements in the Notice and Violation Report” in support of its interpretation of a definition in an industry standard).

8 Id.

9 Response, at 3.


11 Respondent’s Exhibit A, Enterprise Procedure CPP-GEN-06, AC Fault and Lightning Evaluation for Existing Pipelines, §§ 2.1, 3.1 (rev. Apr. 19, 2018). Respondent noted in the Response that, prior to the PHMSA inspection, “the Company did not have a document summarizing the actions it takes to determine if a pipeline is in close proximity to a HVPL and whether additional protection was necessary,” but claimed that the actions required in CPP-GEN-06 were “incorporated in other individual procedures.” Response at 2.

12 See also Region Recommendation to Issue Final Order, CPF 4-2018-5009 (Nov. 13, 2018) (noting that the Chaparral line shares a right-of-way with the HVPL).
lightning.\textsuperscript{13} Given that Enterprise clearly considers collocation of its pipelines with HVPLs to be a risk-factor for fault current or lightning damage, and the presented evidence that the Chaparral line is collocated with HVPLs, it is unclear why Respondent is contesting OPS’s factual determination that Chaparral line is in close proximity to HVPLs. Issues concerning the type of analysis or evaluation necessary to determine whether a pipeline in close proximity to an HVPL or other structures listed in § 195.575(e) must have additional protection are addressed in response to Respondent’s second argument, below.

In Respondent’s second argument, it argues that PHMSA is attempting to require operators to conduct an engineering analysis not contemplated by § 195.575(e) when evaluating the threat of fault current and lightning damage.\textsuperscript{14} This is not the case. In the Notice and the VR, OPS alleged that EPO failed to evaluate the potential threat of fault current and lightning damage and, in the absence of evidence that a line in close proximity to an HVPL was not subject to such damage, failed to demonstrate that said line was protected. OPS did not assert any requirement to conduct a particular engineering analysis. In light of Williams and related PHMSA guidance, an operator must determine whether a line in close proximity to listed structures is subject to potential damage from fault currents and lightning. Respondent’s assertions that its pre-inspection activities were sufficient to demonstrate the Chaparral line was not subject to potential damage are addressed in response to its third argument, below.

With respect to the third argument, Respondent alleges that it took several steps to evaluate the potential threat of fault currents and lightning on the Chaparral line, prior to the PHMSA inspection. Specifically, EPO argues that it evaluated the potential threats “through evaluating operational data and assessment records.”\textsuperscript{15} The company alleges that this data and records review “demonstrated that the Chaparral Pipeline is not in close proximity to an HVPL to trigger the need for additional protective measures under § 195.575(e).”\textsuperscript{16} However, the records provided as exhibits to the Response simply describe the type of coating used on the line, note the results of prior cathodic-protection surveys, and observe that the line has not previously shown any signs of fault current or lightning-related damage. There is no evidence to demonstrate that Respondent conducted an evaluation of whether the Chaparral line was at risk of damage from fault currents or lightning, sufficient to justify the lack of protection required by § 195.575(e).

With respect to the final argument, EPO’s May 2017 taking of soil-resistivity measurements\textsuperscript{17} was an action taken during and after the PHMSA inspection to comply with the requirements of § 195.575(e). The additional data and arguments in the Response constitute post hoc attempts to

\textsuperscript{13} Response at 7 (describing, however, the review for potential fault current and lightning damage as one to determine “close proximity to an HVPL,” rather than a review of data for a line that is already determined to be in close proximity).

\textsuperscript{14} Response, at 5-6.

\textsuperscript{15} Respondent’s Exhibit R, Affidavit of Kyle Costlow, at 2 (June 5, 2018).

\textsuperscript{16} Response, at 7.

\textsuperscript{17} Respondent’s Exhibit Q, Chaparral HVPL Report.
justify Respondent’s decision to not provide protection against damage from fault currents or lightning. After PHMSA discovers a violation of the Pipeline Safety Regulations, subsequent operator actions to come into compliance do not warrant the withdrawal of the proposed violation. Furthermore, the soil-resistivity measurements and other data provided in the Response still do not contain any computation of AC voltage and AC current densities on the Chaparral line or any other analysis as to whether additional protection is needed.

Accordingly, after considering all of the evidence and the arguments presented, I find that Respondent violated 49 C.F.R. § 195.575(e) by failing to evaluate the potential threat of fault currents and lightning on one of the company’s pipeline systems.

This finding of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

**COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Item 1 in the Notice for violation of 49 C.F.R. §§ 195.575(e). Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601.

With regard to the violation of § 195.575(e) (Item 1), Respondent argued the compliance terms should be considered satisfied in light of its April 2018 revisions to Procedure CPP-GEN-06, AC Fault and Lightning Evaluation for Existing Pipelines. As currently written, CPP-GEN-06 does not provide sufficient detail, or reference other procedures or standards, that the operator can use to determine if its pipelines are in close proximity to an HVPL and whether any additional protection against fault currents or lightning is required. Additionally, CPP-GEN-06 does not require Enterprise to maintain records sufficient to allow proper evaluation in § 2.0 of the procedure.

For the above reasons, the Compliance Order is not withdrawn or considered satisfied.

Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

1. With respect to the violation of § 195.575(e) (Item 1), Respondent must review its procedure, CPP-GEN-06, AC Fault and Lightning Evaluation for Existing Pipelines, to ensure that the procedure provides adequate guidance, details, and a method for recording how existing pipelines are being evaluated for their protection against the threat of AC fault currents and lightning. Respondent must also provide a copy of the management-of-change (MOC) documentation that shows the procedure is effective and the date it became effective. Respondent shall submit the revised procedure and MOC documentation to PHMSA no later than 30 days from issuance of this Final Order.
The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension.

It is requested (not mandated) that Respondent maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. 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.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed $200,000, as adjusted for inflation (49 C.F.R. § 190.223), for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this Final Order by Respondent. Any petition submitted must contain a statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The terms of the order, including corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay.

The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.

August 8, 2019

Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety  

Date Issued