

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

ELECTRONIC MAIL - RETURN RECEIPT REQUESTED

September 16, 2022

Manny Cortez
President
Phillips 66 Pipeline, LLC
2331 City West Blvd
Houston, TX 77042

CPF 4-2022-006-NOPV

Dear Mr. Cortez:

From March 11, 2020 through June 4, 2021, 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.) performed an inspection following a reported accident involving Breakout Tank #1401 at the Phillips 66 Pipeline, LLC (Phillips 66) Helena Terminal in Karnes County, Texas. On March 10, 2020, Phillips 66 notified the National Response Center of an unintentional release of 6.50 barrels of crude oil from Breakout Tank #1401 at its Helena Terminal. Phillips 66 determined that undetected weld defects caused the failure.

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 (C.F.R). The items inspected and the probable violations are:

- 1. § 195.202 Compliance with specifications or standards**
Each pipeline system must be constructed in accordance with comprehensive written specifications or standards that are consistent with the requirements of this part.

Phillips 66 failed to construct Breakout Tank #1401 in Karnes County, Texas, in accordance with comprehensive written specifications as required by § 195.202. Specifically, Phillips 66 failed to

follow its own procedure, *Aboveground Atmospheric Storage Tank (P66 MEP 4510, Rev. 1, 10/26/2017)* and the written procedure of manufacturer of the tank, *Smith Tank & Steel Inc., NDE Procedure, Vacuum Testing Procedure (STS-VBT-001), Section 5.0 Surface Preparation* as required by API Std 650.¹

On March 10, 2020, Phillips 66 notified the National Response Center of a leak from the newly constructed and recently commissioned breakout tank. This failure resulted in the unintentional release of 6.50 barrels of crude oil. A post-accident investigation by Phillips 66 determined that weld defects on the bottom of the tank that had not been detected by the required testing and examinations caused the accident. The visual examination and vacuum box testing performed during the failure investigation revealed 28 indications with 17 confirmed indications that required repairs. Phillips 66 failed to properly remove weld slag, debris and conduct visual inspections before pre-commissioning vacuum box testing. These failures masked the defects that resulted in the release and were causal to the reported accident.

In addition, Phillips 66 failed to construct Breakout Tank #1401 in accordance with § 195.132(a)(3). This regulation states that storage tanks must be designed and constructed in accordance with API Std 650. Section 6.6 of API Std 650 states that “[v]acuum testing shall be performed in accordance with a written procedure prepared by the manufacturer of the tank.” Phillips 66 used the procedures of Smith Tank & Steel, Inc. but failed to follow section 5.2 which states that “[w]elds shall be clean and free of slag and loose debris.”

Therefore, Phillips 66 failed to construct Breakout Tank #1401 in accordance with its comprehensive written specifications as required by §§ 195.202 and 195.132(a)(3).

2. § 195.579 What must I do to mitigate internal corrosion?

(a)

(d) Breakout tanks. After October 2, 2000, when you install a tank bottom lining in an aboveground breakout tank built to API Spec 12F (incorporated by reference, see § 195.3, API Std620 (incorporated by reference, see § 195.3), API Std 650 (incorporated by reference, see § 195.3), or API Std650’s predecessor, Standard 12C, you must install the lining in accordance with API RP 652 (incorporated by reference, see § 195.3). However, you don’t need to comply with API RP 652 when installing any tank for which you note in the corrosion control procedures established under § 195.402(c)(3) why compliance with all or certain provisions of API RP 652 is not necessary for the safety of the tank.

Phillips 66 failed to install the tank bottom lining in Breakout Tank #1401 in accordance with API RP 652 as required by § 195.579(d) and its written procedures. Specifically, Phillips 66 failed to conduct adequate surface preparation, improperly applied the tank bottom epoxy liner, failed to properly visually inspect the epoxy liner for holidays after installation, and failed to repair the defects in the epoxy liner.

¹ See Exh A-7, P66 MEP4510 Aboveground Atmospheric Storage Tank (Oct. 26, 2017); Exh. A-10, Smith Tank Service Vacuum Box Testing (Mar. 11, 2014).

The failure investigation determined that the bottom lining had been installed over bottom plate welds that did not have slag and debris removed, there were visible defects in the lining that were not repaired, and that the lining was damaged during installation. The failure investigation also determined that there were pinholes through the welds.

Section 7 of API RP 652 requires adequate surface preparation prior to installation of tank bottom liners. Section 9 of API RP 652 requires inspections during all phases of lining installation to ensure proper installation. In addition, Phillips 66's written procedures, *Application of Internal Coating on Storage Tanks and Vessels specification (P66-MEP-5070, Rev 1, Effective Date 2017-11-14)* sections 8.4 and 9.9 include specific surface preparation, application, visual inspection, and coating holiday inspection requirements.² Sections 12.8 and 13.2 contain specific requirements to visually inspect the liner after curing and to repair any defects.³ Phillips 66 failed to follow all of the above listed requirements. Phillips 66 failed to adequately prep the surface by removing slag and debris, failed to inspect the liner during all phases of installation, and failed to repair visible defects in the liner.

After the release, the tank was taken out of service, cleaned, and photographed. Photographs showed pores in the tank bottom epoxy lining where it was applied over welds containing irregularities, weld slag, and debris. The photographs also indicated that the welds were not ground smooth and rounded according to the section 8.4 of Phillips 66's procedure. Despite applying the epoxy lining over the entire welded steel tank bottom, post-accident testing determined the welds contained pinholes that, along with visible defects in the tank bottom epoxy lining, allowed the tank to leak. Phillips 66's failure to follow API RP 652 and its procedures was causal to the accident.

Post-accident photos also showed footprints on the tank bottom prior to the epoxy being cured, resulting in coating defects (holidays) that compromised the coatings effectiveness. This photographic evidence indicates that Phillip 66 failed to adequately inspect the liner after

² Section 8.4 states that "[d]uring surface preparation, but prior to abrasive blasting, weld roughness shall meet NACE Standard SP0178, Visual Comparator surface finish of Grade D – "Ground Smooth and Blended." Weld splatters and protrusions shall be removed and all edges rounded to a minimum 1/8 inch radius by grinding. Surface condition shall be visually inspected by the Coating Contractor prior to abrasive blasting."

Section 9.9 states that "[a]ll surfaces shall be inspected and accepted as satisfactory by the Coating Inspector prior to coating application. Coating contractor shall also inspect all surfaces after cleaning and shall notify the Coating Inspector of any defects, improper material, poor workmanship or other conditions, which, in his opinion, shall affect the satisfactory performance and permanency of his work. Where such defects have been discovered, no coating shall be applied until all defects have been corrected or until a written agreement has been made with the Owner's Inspector regarding any subsequent defects that may develop because of the condition noted."

³ Section 12.8 states that "[a] final inspection shall be conducted after the coating has been completely cured in accordance with the manufacturer's procedure and prior to the tank being put to service."

Section 13.2 states that "[d]efects such as holidays, air pockets, bubbles, trash in the coating, or other defects must be removed by grinding, sanding, chipping, or other abrasion. Feather and rough edges of coating around removed defects. Apply a full thickness coat of coating primer over any bare metal an onto the roughing coating."

installation and repair defects in the liner according to sections 12.8 and 13.2 of its procedures.

Therefore, Phillips 66 failed to construct Breakout Tank #1401 in accordance with § 195.579(d) and its written procedures.

3. § 195.307 Pressure testing aboveground breakout tanks.

(a)

(c) **For aboveground breakout tanks built to API Std 650 (incorporated by reference, see § 195.3) and first placed in service after October 2, 2000, testing must be in accordance with sections 7.3.5 and 7.3.6 of API Standard 650 (incorporated by reference, see § 195.3).**

§ 195.202 Compliance with specifications or standards.

Each pipeline system must be constructed in accordance with comprehensive written specifications or standards that are consistent with the requirements of this part.

Phillips 66 failed to perform a hydrostatic test in accordance with its written procedures and API Standard 650 as required by § 195.307(c) for its breakout tanks at the Wink and Crane, Texas terminals. Specifically, Phillips 66 failed to receive proper approval for deviation from hydrostatic testing because practical access to water was available.

API Standard 650, Section 7.3.5 (2) provides for an exemption of hydrostatic testing if there is a lack of sufficient water to fill the tank for hydrostatic testing. Phillip 66's written procedure *Hydrostatic Testing - Atmospheric Storage Tanks (P66-MPR-6202, Rev 5, Effective Date 2017-10-24* provides for hydrostatic testing and the requirements for approval of exemptions from testing, as permitted by API Standard 650. Specifically, section 9.1.1.2 of Phillips 66's procedure states that "[w]hen practical access to water is not readily available, a deviation requesting an exemption for hydrostatic testing shall be submitted to the Phillips 66 Tank and Facility Integrity Group. The decision to use other methods in lieu of hydrostatic testing for new tanks requires approval by the President of Transportation."

Phillips 66 determined that a deviation from hydrostatic testing was required "due to insufficient water in the area, but also due to the economic impact of getting water to the site."⁴ However, Phillips 66 recently conducted hydrostatic testing on the pipelines that directly connect to the Wink and Crane terminals. Therefore, there was sufficient water available for the hydrostatic testing of the tanks because Phillips 66 could use the same source of water it used for the connecting pipelines.

Therefore, Phillips 66 failed to perform a hydrostatic test in accordance with §§ 195.202 and 195.307(c).

⁴ Exh. B-3, Tank Hydrotest Deviation White Paper, at 3 (Apr. 30, 2019).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 C.F.R. § 190.223, you are subject to a civil penalty not to exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violations occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violations occurring on or after January 11, 2021, and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violations occurring on or after July 31, 2019, and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violations occurring on or after November 27, 2018, and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violations occurring on or after November 2, 2015, and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$552,800 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$276,400
2	\$276,400

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. We advise you to promptly correct this item. Failure to do so may result in additional enforcement action.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you 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 C.F.R. § 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 4-2022-006-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Bryan Lethcoe
Director, Southwest Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

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

cc: Manny Cortez, President, manny.h.cortez@p66.com
Jeff Shouse, DOT Coordinator, jeff.d.shouse@p66.com