



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

1200 New Jersey Avenue, SE  
Washington, DC 20590

December 22, 2021

**VIA ELECTRONIC MAIL TO: robert.peterson@oxy.com**

Mr. Robert Peterson  
Senior Vice President and Chief Financial Officer  
Occidental Petroleum Corporation  
5 Greenway Plaza  
Houston, Texas 77046

**Re: CPF No. 4-2020-5015**

Dear Mr. Peterson:

Enclosed please find the Final Order issued in the above-referenced case. It makes a finding of violation and assesses a reduced civil penalty of \$81,300. It further finds that Bravo Pipeline Company, a subsidiary of Occidental Petroleum Corporation, has completed the actions specified in the Notice to comply with the pipeline safety regulations. When the civil penalty has been paid, this enforcement action will be closed. Service of the Final Order by e-mail is effective upon the date of transmission as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

ALAN KRAMER  
MAYBERRY

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MAYBERRY  
Date: 2021.12.22 08:36:04 -05'00'

Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety

Enclosure

cc: Ms. Mary McDaniel, PE, Director, Southwest Region, Office of Pipeline Safety, PHMSA  
Mr. Vishal Gupta, President and General Manager, Permian EOR, Occidental Petroleum Corporation, vishal\_gupta@oxy.com  
Mr. Bradley Holland, Bravo Pipeline Company, Pipeline Operations Lead, bradley\_holland@oxy.com

**CONFIRMATION OF RECEIPT REQUESTED**

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, D.C. 20590**

<b>In the Matter of</b>	)	
<b>Bravo Pipeline Company,</b>	)	
<b>    a subsidiary of Occidental Petroleum Corporation,</b>	)	<b>CPF No. 4-2020-5015</b>
<b>Respondent.</b>	)	
	)	

**FINAL ORDER**

From January 22, 2018 through May 4, 2018, 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 Bravo Pipeline Company, a subsidiary of Occidental Petroleum Corporation (OXY or Respondent) in Colorado, New Mexico, and Texas. The Bravo pipeline system consists of two PHMSA-regulated pipelines, the Bravo Pipeline (465 miles), and the Sheep Mountain Pipeline (408 miles), which deliver CO2 from Colorado and New Mexico to CO2 enhanced oil recovery (EOR) fields in the Permian Basin of West Texas and eastern New Mexico.

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated October 27, 2020, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that OXY had violated 49 C.F.R. § 195.571, proposed assessing a civil penalty of \$105,500 for the alleged violation, and proposed ordering Respondent to take certain measures to correct the alleged violation. The Notice also included an additional warning item pursuant to 49 C.F.R. § 190.205, which required no further action, but warned the operator to correct the probable violation or face possible future enforcement action.

After requesting and receiving an extension of time to respond, OXY responded to the Notice by letter dated February 25, 2021 (Response). OXY contested the allegation, offered additional information in response to the Notice, and requested that the proposed civil penalty be reduced or eliminated. 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 195.571, as follows:

**Item 1:** The Notice alleged that Respondent violated 49 C.F.R. § 195.571, which states:

**§ 195.571 What criteria must I use to determine the adequacy of cathodic protection?**

Cathodic protection required by this subpart must comply with one or more of the applicable criteria and other considerations for cathodic protection contained paragraphs 6.2.2, 6.2.3, 6.2.4, 6.2.5 and 6.3 in NACE SP 0169 (incorporated by reference, *see* § 195.3).

The Notice alleged that Respondent violated 49 C.F.R. § 195.571 by failing to comply with the cathodic protection criteria required by § 195.571, which states that cathodic protection required by Subpart H must comply with one or more of the applicable criteria in addition to other considerations included in the incorporated by reference NACE SP 0169. Specifically, the Notice alleged that OXY failed to meet the established criteria (a negative (cathodic) potential of at least 850 millivolts with cathodic protection current applied, with consideration given to voltage drops other than those across the pipe-to-soil boundary) in both NACE SP 0169 and the operator's corrosion control procedures for 47 separate pipeline segments across its Bravo pipeline system. Based on a review of the OXY's annual surveys (three years of pipe to soil readings from 2015-2017), PHMSA alleged that OXY's records showed at least 33 test stations that failed to meet the specified criterion for at least two consecutive annual surveys (2015 and 2016), and in some instances three consecutive annual surveys (2015, 2016, and 2017).

In its Response, OXY contested that allegation of violation and stated that it "promptly and diligently worked to take corrective action and that at all times, Oxy maintained adequate cathodic protection in its pipeline system in accordance with 49 CFR 195.571."<sup>1</sup> OXY stated that after observing readings less negative than the -850mV 'on' criteria during an annual cathodic protection survey in November of 2015 for the Bravo pipeline system, it immediately increased the current output from the Bravo Dome rectifier in an attempt to increase potentials.<sup>2</sup> After allowing time for polarization and observing no response to the actions taken to increase the potentials, OXY claims that it took the following additional actions: (1) Increased the current output from multiple influencing rectifiers (Bravo dome and MLV3) on the pipeline in 2016; (2) Electrically isolated the Bravo Dome rectifier current from the station piping; (3) Acquired and installed two additional rectifiers on the Bravo Dome and 8" Anton pipeline segments in 2017-2018; (4) Conducted a depolarization survey and applied the 100mV polarization criterion to demonstrate that there was adequate cathodic protection on the pipelines in the third quarter of 2017; (5) Reviewed two inline inspection (ILI) assessments from 2012 and 2017, which found very minor corrosion along the entire pipeline, and specifically in and near where the low cathodic protection potentials were observed; and (6) at locations along the pipeline not meeting the polarized potential of -850 mV (instant-off), OXY maintained the 2018 planned rectifier installations during the second quarter of 2018 and permanently isolated the existing Bravo Dome rectifier to solely protect the Bravo Dome station.<sup>3</sup> These actions resulted in the pipelines

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<sup>1</sup> Response, at 1.

<sup>2</sup> *Id.* at 2.

<sup>3</sup> *Id.* at 2-3.

being cathodically protected by the new MLV2, MP 46.9 and existing MLV3 rectifiers only. According to OXY, the 2018, 2019 and 2020 subsequent annual cathodic protection surveys showed that all potentials were more negative than the -850 mV 'on' criteria required by the NACE and OXY standards.<sup>4</sup>

Although OXY took documented steps to achieve compliance with the regulation and its own procedures, as outlined above, there is no dispute that OXY failed to achieve the -850mV criterion for 47 separate pipeline segments across its Bravo pipeline system between 2015 and 2017. OXY's annual survey records for 2015, 2016, and 2017 showed that the -850 mV cathodic protection criteria specified by its procedures had not been met for the 33 test stations identified in the Notice, and OXY does not dispute this fact. In addition, the record contains no evidence to show that OXY considered IR drop in determining the adequacy of the cathodic protection, as required by the Part 195 referenced standard and its own procedures.

OXY argues that it had met the 100mV polarization criterion allowed by NACE SP 0169; however, the operator's own procedures specified only the use of the -850mV criterion with consideration of IR drop. OXY did not have procedures in place for using the 100mV criterion, and its procedures specifically stated that the -850mV criterion would be used. In sum, it is undisputed that OXY had recorded low annual cathodic protection survey potentials on the identified segments for 2015, 2016, and 2017 using the specified -850mV criterion, in violation of the regulation and its own procedures.

Accordingly, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.571 by failing to meet the established criteria in both NACE SP 0169 and the operator's corrosion control procedures.

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

### **ASSESSMENT OF PENALTY**

Under 49 U.S.C. § 60122, Respondent is subject to an administrative civil penalty not to exceed \$200,000 per violation for each day of the violation, up to a maximum of \$2,000,000 for any related series of violations.<sup>5</sup>

In determining the amount of a civil penalty under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, I must consider the following criteria: the nature, circumstances, and gravity of the violation, including adverse impact on the environment; the degree of Respondent's culpability; the history of Respondent's prior offenses; any effect that the penalty may have on its ability to continue doing business; the good faith of Respondent in attempting to comply with the pipeline safety regulations; and self-disclosure or actions to correct a violation prior to discovery by PHMSA. In addition, I may consider the economic benefit gained from the violation without any reduction

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<sup>4</sup> *Id.*, at 3.

<sup>5</sup> These amounts are adjusted annually for inflation. *See* 49 C.F.R. § 190.223.

because of subsequent damages, and such other matters as justice may require. The Notice proposed a total civil penalty of \$105,500 for the violation cited above.

**Item 1:** The Notice proposed a civil penalty of \$105,500 for Respondent's violation of 49 C.F.R. § 195.571, for failing to meet the established criteria in both NACE SP 0169 and the operator's corrosion control procedures on 47 separate pipeline segments across its Bravo pipeline system. In addition to the defenses outlined above, OXY attempts to mitigate the noncompliance by stating that it reviewed two Magnetic Flux Leakage (MFL) in-line inspections (ILI) that were performed in 2012 and 2017 to determine if there were indications of external corrosion as a result of its cathodic protection deficiencies. OXY claimed that there were only minor indications of corrosion from these ILI runs.

Although I rejected OXY's argument that the actions it took in an effort to remediate the deficiencies with its cathodic protection system warranted a withdrawal of the alleged violation, I do find that the actions constitute a basis for reducing the civil penalty under the culpability factor. While the actions taken by OXY did not remediate the deficiencies prior to the inspection, it is undisputed that OXY found the problem and took documented steps to correct it prior to PHMSA's inspection. As such, OXY should be given credit for these actions when assessing the operators' culpability for purposes of calculating a civil penalty in this case.

I do not agree that performance of ILI in 2012 and 2017 would constitute a basis to further reduce the proposed civil penalty in this case. The performance of a 2012 ILI would not indicate corrosion from cathodic protection deficiencies in 2015, 2016, and 2017. In addition, external corrosion is a time-dependent threat and the specific environment and circumstances of the pipeline determines the rate of corrosion, and even minor indications of corrosion detected in 2017 may have resulted from the cathodic protection deficiencies. With regard to the other civil penalty criteria that I am required to assess, I find that PHMSA met its burden. The annual cathodic protection readings recorded show that OXY failed to comply with the applicable cathodic protection criteria required by the operator's own corrosion control procedures, § 195.571, and NACE SP 0169. This was the case for at least two consecutive annual surveys, and in some instances three consecutive years for the test stations identified in the Notice. Additionally, the measures discussed in OXY's Response provide no reasonable justification for why the operator failed to comply with the requirement.

Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a reduced civil penalty of **\$81,300** for a violation of 49 C.F.R. § 195.571.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require such payment to be made by wire transfer through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMK-325), Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 S MacArthur Blvd, Oklahoma City, Oklahoma 79169. The Financial Operations Division telephone number is (405) 954-8845.

Failure to pay the \$81,300 civil penalty will result in accrual of interest at the current annual rate

in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a district court of the United States.

### **COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Item 1 in the Notice for a violation of 49 C.F.R. § 195.571. 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. The Director indicates that Respondent has taken the following actions specified in the proposed compliance order:

1. With respect to the violation of § 195.571 (**Item 1**), the Respondent provided annual cathodic protection survey records for 2018 and 2019 showing that the pipeline has achieved adequate cathodic protection in accordance with § 195.571, and NACE SP 0169.

Accordingly, I find that compliance has been achieved with respect to this violation. Therefore, the compliance terms proposed in the Notice are not included in this Order.

### **WARNING ITEM**

With respect to Item 2, the Notice alleged probable violation of Part 195, but identified it as a warning item pursuant to § 190.205. The warning was for:

- 49 C.F.R. § 195.589(c) (**Item 2**) — Respondent's alleged failure to maintain its Bravo CO2 Pipeline records in sufficient detail to demonstrate the adequacy of corrosion control measures.

OXY presented information in its Response showing that it had taken certain actions to address the cited items. If OPS finds a violation of this provision in a subsequent inspection, Respondent may be subject to future enforcement action.

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, 2<sup>nd</sup> 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 the Final Order by Respondent. Any petition submitted must contain a brief statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The filing of a petition automatically stays the payment of any civil penalty assessed. The other terms of the order, including any corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay. If Respondent submits payment of the civil penalty, the Final Order becomes the final

administrative decision and the right to petition for reconsideration is waived.

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

**ALAN KRAMER**  
**MAYBERRY**

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Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety

December 22, 2021

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Date Issued