

February 4, 2016

Mr. Michael A. Creel
Chief Executive Officer
Enterprise Products Operating LLC
1100 Louisiana Street
Houston, TX 77002

Re: CPF No. 4-2013-5011

Dear Mr. Creel:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation, withdraws one allegation, assesses a reduced civil penalty of \$77,400, and specifies corrective action that must be completed. The penalty payment terms are set forth in the Final Order. When the civil penalty has been paid and the terms of the compliance order completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Final Order is made pursuant to 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. R. M. Seeley, Director, Southwest Region, PHMSA, OPS
Mr. Vince Murchison, Murchison Law Firm, PLLC
325 N Saint Paul St, Suite 2700, Dallas, TX 75201-3892

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

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

In the Matter of)
)
Enterprise Products Operating LLC,) **CPF No. 4-2013-5011**
)
Respondent.)

FINAL ORDER

Between April 30 and August 24, 2012, pursuant to 49 U.S.C. § 60117, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an inspection of the pipeline facilities and records of Enterprise Products Operating LLC (Enterprise or Respondent) in Texas, Louisiana, and Arkansas.¹

As a result of the inspection, the Director, Southwest Region, OPS, issued a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order on May 1, 2013 (Notice). In accordance with 49 C.F.R. § 190.207, the Notice alleged three violations of the hazardous liquid pipeline safety standards, proposed a civil penalty of \$106,100, and proposed a compliance order. In accordance with § 190.205, the Notice also included eight warning items.

Enterprise responded on August 28, 2013, and requested a hearing. Additional written materials were submitted by Respondent on January 27, 2014. In accordance with 49 C.F.R. § 190.211, a hearing was held in Houston, Texas, on February 6, 2014, before a Presiding Official from the Office of Chief Counsel, PHMSA. After the hearing, Enterprise submitted further written materials on April 30 and November 12, 2014. Pursuant to § 190.209(b)(7), the Director submitted a written evaluation of Respondent's response material on June 16, 2014.

FINDINGS OF VIOLATION

Items 5, 8, and 9 of the Notice alleged that Respondent committed violations of the pipeline safety standards in 49 C.F.R. Part 195. The alleged violations were as follows:

¹ Enterprise is a subsidiary of Enterprise Products Partners L.P. and operates about 23,000 miles of pipeline transporting primarily highly volatile liquids, as reported by Respondent for calendar year 2014.

Item 5: The Notice alleged that Respondent violated 49 C.F.R. § 195.402(a), which states:

§ 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

(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 . . .

(5) Analyzing pipeline accidents to determine their causes.

(6) Minimizing . . . the possibility of recurrence of accidents analyzed under paragraph (c)(5) of this section.

The Notice alleged that Respondent violated § 195.402(a) by failing to follow its written procedures when investigating an accident. Specifically, the Notice alleged that Respondent's procedures required that all accidents be investigated and that additional actions be taken to prevent recurrence. When OPS inspectors requested documentation related to an accident that had occurred on November 22, 2011, in Sulphur, Louisiana, OPS inspectors concluded that Respondent never completed a post-accident review.

At the hearing, OPS explained that Respondent conducted a preliminary investigation of the accident and prepared a report titled Preliminary Incident Report (PIR) 11410. OPS contended the PIR proved Respondent did not perform a complete incident investigation because Respondent had checked a box labeled "No" next to the phrase "Incident Investigation."² OPS also stated that the title of the PIR has the word "Preliminary" in it, implying the document itself is not a complete investigation report. Finally, OPS noted that a Company employee said that an investigation was not conducted.

In response, Respondent argued that it complied with its procedures. The Company stated that it had completed an investigation of the accident, identified the root cause, documented the investigation in the PIR, and took action to prevent recurrence by having a safety meeting with operating personnel. Respondent explained that the box checked "No" in the PIR simply indicated that no *further* investigation was required. Likewise, Respondent explained the word "Preliminary" in the title of the PIR was not in regard to the report's completeness, but rather reflected the purpose of the report, which is to determine whether additional investigation is required. Respondent denied an employee had ever said an investigation was not completed, claiming that the employee had provided the PIR to OPS.

² Violation Report, Exhibit A-5: Enterprise Preliminary Incident Report (PIR) 11410 (Nov. 22, 2011).

Applicable Safety Standards

Section 195.402 of the hazardous liquid pipeline safety standards requires pipeline operators to prepare a manual of written procedures for the operation and maintenance (O&M) of their pipeline facility. The manual must include procedures for analyzing pipeline accidents to determine their cause and for minimizing the possibility of recurrence.³ Operators are required to follow their written O&M procedures.⁴

Analysis

PHMSA reviews the record to determine whether Respondent followed its written procedures for investigating the accident that occurred on November 22, 2011. Respondent's O&M manual contained Section 702, titled "Investigation of Failures."⁵ Section 702 stated that all accidents "shall be investigated and analyzed for the purpose of determining the cause and to minimize the potential for hazards and possibility of a recurrence."⁶ The procedure required that the information acquired from an investigation be "utilized as soon as possible to prevent a recurrence of failures or accidents from the same cause."⁷ Section 702 also specified that accidents must be "documented using Company forms or reports where applicable. These forms or reports shall be supplemented by a written report when requested by Pipeline Management."⁸ These are the procedures that governed Respondent's investigation of the accident that occurred on November 22, 2011.

On the day of the accident, Respondent's personnel responded to the station where the accident occurred and found a leak on a pig trap door.⁹ The station was shut down and the pig trap was closed, which stopped the leak. The root cause of the leak was determined to be the o-ring on the trap door, and the o-ring was replaced. Respondent completed the PIR form the same day. The form stated that a discussion would take place with all employees at a safety meeting. That safety meeting was held on December 6, 2011, and covered the cause of the accident and instructions for preventing recurrence.¹⁰

PHMSA finds the evidence demonstrates that Respondent performed an accident investigation, which identified the cause of the failure, and Respondent took action to prevent recurrence by

³ § 195.402(c)(5) and (c)(6).

⁴ § 195.402(a).

⁵ Violation Report, Exhibit A-5: Enterprise Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance, and Emergencies (OM&E): Section 702 (Investigation of Failures).

⁶ OM&E Section 702.

⁷ *Id.*

⁸ *Id.*

⁹ PIR 11410.

¹⁰ Respondent Hearing Exhibit 7: Enterprise Form SF30 "Safety Meeting Minutes" (Dec. 6, 2011).

discussing the information with personnel. These actions were consistent with Respondent's written procedures in Section 702 of the O&M manual.

Although OPS took issue with the box checked "No" next to the phrase "Incident Investigation" on the PIR form, the evidence shows that Respondent did perform an investigation for the purpose of completing the form, consistent with its procedures for documenting an accident investigation. Under these procedures, an additional written supplement to the PIR form could be prepared, but was only required "when requested by Pipeline Management."¹¹ In this case, Respondent had determined that supplementing the form was not necessary because the root cause had already been identified and actions were planned to prevent recurrence.

The word "Preliminary" in the title of PIR form cannot be the sole basis for a violation, as Respondent has plausibly explained how the form is used to determine whether or not additional investigation is needed, which is consistent with its procedures. Respondent is encouraged, however, to amend its Section 702 to clarify when appropriate boxes should be checked and under what circumstances management will request supplementing the PIR form.

Having found that Respondent investigated and analyzed the accident, determined the cause, completed the designated investigation form, and took action to minimize the potential for recurrence, there is insufficient evidence to prove Respondent failed to follow its procedures. Accordingly, the allegation that Respondent violated § 195.402(a) is withdrawn.

Item 8: The Notice alleged that Respondent violated 49 C.F.R. § 195.505, which states in relevant part:

§ 195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) Identify covered tasks;
- (b) Ensure through evaluation that individuals performing covered tasks are qualified . . .

(h) After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities

§195.501 Scope.

- (a)
- (b) For the purpose of this subpart, a *covered task* is an activity, identified by the operator, that:
 - (1) Is performed on a pipeline facility;
 - (2) Is an operations or maintenance task;
 - (3) Is performed as a requirement of this part; and

¹¹ OM&E Section 702.

(4) Affects the operation or integrity of the pipeline.

§195.503 Definitions.

Qualified means that an individual has been evaluated and can:

- (a) Perform assigned covered tasks and
- (b) Recognize and react to abnormal operating conditions.

The Notice alleged that Respondent violated § 195.505 by failing to have a written operator qualification (OQ) program to ensure that individuals were qualified to perform a covered task. Specifically, the Notice alleged Respondent's OQ program identified the covered task of measuring cathodic protection in regard to a copper reference half-cell. At the Baytown terminal, several breakout tanks used zinc reference electrodes, not copper. Measurements from a zinc reference electrode require a conversion for determining the adequacy of cathodic protection with regard to a copper reference. The Notice alleged that Respondent's OQ program did not ensure individuals were qualified to perform that data conversion when using zinc reference electrodes.

The evidence in the record offered by OPS to support the allegation included Respondent's cathodic protection survey report with specific tanks highlighted to show readings were taken using zinc reference electrodes.¹² OPS documented observations that zinc reference electrodes were permanently installed underneath certain tank bottoms.¹³ Respondent's procedures document use of the -850mV criteria for determining adequacy of cathodic protection.¹⁴

In response, Respondent acknowledged that its OQ program identified the covered task of measuring cathodic protection, including the reporting of cathodic protection deficiencies. Respondent contended, however, that its OQ program is not limited to copper reference electrodes as alleged in the Notice, but is generally applicable to all electrodes.¹⁵ Rather than distinguishing among different types of electrodes, the Company's covered task relates to the measurement of cathodic protection voltage and the reporting of cathodic protection deficiencies. Deficiencies include a wide range of issues, such as equipment damage, low cathodic protection levels, and environmental conditions.

In addition, Respondent argued that conversion of data from zinc electrodes is not specifically mentioned in the OQ program because that activity does not meet the definition of a covered task.¹⁶ A covered task is defined in the regulations as an activity that is "performed on a pipeline

¹² Violation Report, Exhibit A-8: Enterprise Annual Pipe to Soil Potential Survey Report (Jul. 17, 2012).

¹³ Violation Report at 53.

¹⁴ Violation Report, Exhibit A-9: Enterprise Corrosion Prevention Program, Document CP13 (rev. 3) at 5 (Jun. 24, 2011) (stating the primary criteria for all facilities is a cathodic potential of at least -850mV with regard to a copper/copper sulfate reference electrode).

¹⁵ Enterprise Post-hearing Brief at 29–30 (Apr. 30, 2014).

¹⁶ Enterprise Post-hearing Brief at 31.

facility.”¹⁷ Data conversion, Respondent argued, can be performed in an office by another individual. Since the activity is not a covered task, Respondent reasoned that it is not required to be in the OQ program.

Applicable Safety Standards

Pipeline operators are required to have a written OQ program that includes provisions to ensure individuals performing covered tasks are qualified.¹⁸ Covered tasks are operations or maintenance activities, identified by the operator, that are performed on a pipeline facility as a requirement of the safety regulations, which could affect the operation or integrity of the pipeline.¹⁹ Individuals are qualified if they have been evaluated and can perform the assigned covered task and recognize and react to abnormal operating conditions.²⁰

Analysis

PHMSA reviews the record to determine whether Respondent’s OQ program had provisions to ensure that individuals measuring cathodic protection were evaluated on their ability to perform the task and to recognize and react to abnormal operating conditions.

Respondent’s OQ program identified the covered task “1.1 Measure Structure to Soil Potentials.”²¹ This covered task included a list of activities and steps, including among other things: connecting the leads of the multi-meter; recording the value of the voltage displayed; completing documentation; and making required notifications of deficiencies found.²² The OQ program also identified low potential readings as an abnormal operating condition, which required documentation and notification of a supervisor.²³

The applicable criteria Respondent used to determine the adequacy of cathodic protection was the -850mV criteria.²⁴ This criteria requires measurement with respect to a copper/copper sulfate

¹⁷ § 195.501.

¹⁸ § 195.505(b).

¹⁹ §195.501.

²⁰ § 195.503.

²¹ See, e.g., Respondent Hearing Exhibit 8: Enterprise Evaluation Guide/Checklist (for covered task “1.1 Measure Structure to Soil Potentials”) (Feb. 14, 2011).

²² Enterprise Evaluation Guide/Checklist at 2.

²³ Enterprise Evaluation Guide/Checklist at 3 (listing abnormal operating conditions, including “low potential readings”). See also API RP 1161 Recommended Practice for Pipeline Operator Qualification (Jan. 2014), cited by Respondent in its Post-hearing Brief at 33. API RP 1161, Annex B at 20 lists “voltage less than minimum requirements” as an abnormal operating condition that could be encountered while performing the covered task of measuring cathodic protection.

²⁴ Violation Report, Exhibit A-9: Enterprise Corrosion Prevention Program Document CP13 (rev. 3) at 5 (Jun. 24, 2011).

reference electrode.²⁵ The use of a different type of reference electrode, such as zinc, requires a conversion of the data to determine if the level of cathodic protection meets the -850mV criteria.²⁶ A potential measurement with reference to zinc must be converted to a potential measurement with reference to copper/copper sulfate.

When performing the covered task of measuring cathodic protection, a qualified individual must be able to identify and document low readings that do not meet the -850mV criteria. This means that when taking readings with zinc reference electrodes, the individual must be able to accurately convert the data to a copper/copper sulfate reference measurement.²⁷ The data conversion process necessary to determine if the reading is outside applicable criteria is integral to both the completion of the covered task and recognition of abnormal operating conditions.

Respondent's argument that data conversion, by itself, does not meet the definition of a covered task is beside the point. The covered task of measuring cathodic protection is comprised of a series of steps and actions each of which must be performed by the qualified individual to complete the covered task. It is not material if one of those steps does not itself meet the definition of a covered task. What is material is whether Respondent's OQ program provided for the evaluation of an individual to ensure they are qualified and can recognize abnormal operating conditions. A qualified individual measuring cathodic protection must be able to identify low readings with regard to the applicable criteria when using zinc electrodes. Therefore, the data conversion process is a necessary element of the covered task and must be included in the OQ program for that task.

Respondent's argument that the conversion process could be performed in the office by someone other than the individual at the pipeline provides no additional support. Section 195.505 requires each qualified individual performing a covered task to be able to recognize and react to abnormal operating conditions. Respondent's OQ program also requires qualified individuals to be able to recognize measurements that are outside applicable criteria. Respondent cannot avoid these requirements by having different individuals perform different parts of a single covered task.

²⁵ Section 6.2.2.1.1 of NACE SP0169; section 8.2.2.1 of API RP 651 (both incorporated by reference at § 195.3). *See also* Enterprise Corrosion Prevention Program Document CP13 at 5 (requiring cathodic potential of at least -850mV with respect to "Cu/CuSO₄ [copper/copper sulfate] reference electrode").

²⁶ *See, e.g.*, Post-hearing Brief, Exhibit 24: Declaration of Kyle L. Costlow at 2 (stating "to convert from a potential measurement with reference to zinc to a potential measurement with reference to copper/copper sulfate, it is a function of subtracting an established factor (number) from the measured voltage potential with reference to zinc"). *See also* Post-hearing Brief, Exhibit 17: Enterprise Corrosion Prevention Program, Document CP13 (rev. 5), Appendix A at 15 (Feb. 4, 2013) (providing a conversion table for five types of electrodes).

²⁷ Respondent suggested that the conversion is a matter of simple subtraction and that an inadequate reading using zinc electrodes can never be misinterpreted as adequate cathodic protection. This assumes, however, that the person taking the reading is qualified to do the conversion accurately in the first place.

Respondent also argued that OPS failed to prove Respondent's OQ program did not already encompass measuring cathodic protection using zinc electrodes.²⁸ PHMSA finds the evidence demonstrates that Respondent used a criteria that requires reference to copper/copper sulfate reference. PHMSA also find that the covered task identified in the OQ program requires reporting deficiencies, and does not encompass conversion or interpretation of cathodic protection data.²⁹ Having reviewed Respondent's OQ program, PHMSA finds the program did not have provisions to ensure that individuals measuring cathodic protection with zinc electrodes were evaluated on their ability to accurately identify low potentials by converting the data to a potential measurement with reference to copper/copper sulfate.

Finally, Respondent contended that it did not have adequate notice of the alleged violation until the hearing, at which point OPS alleged there were issues with Respondent's data entry and the identification of deficiencies.

By its terms, the Notice alleged that Respondent "did not provide a written qualification program specifically dealing with the measurement of cathodic protection systems which utilize zinc reference electrodes."³⁰ The Notice also referenced whether "field technicians are well trained on zinc reference electrodes conversion" and whether they could "interpret the zinc conversion accurately." PHMSA finds Respondent was appropriately apprised of the nature of the allegation.³¹

For the above reasons, PHMSA finds Respondent violated § 195.505 by failing to have a written qualification program that includes provisions to ensure through evaluation that individuals measuring cathodic protection with zinc reference electrodes are qualified.

Item 9: The Notice alleged that Respondent violated 49 C.F.R. § 195.573(d), which states:

§ 195.573 What must I do to monitor external corrosion control?

(a) *Protected pipelines.* You must do the following to determine whether cathodic protection required by this subpart complies with § 195.571:

(1) Conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months

(d) *Breakout tanks.* You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API Recommended Practice 651. However, this inspection is not

²⁸ Post-hearing Brief at 29-30.

²⁹ Respondent acknowledges this. Post-hearing Brief at 30.

³⁰ Notice at 6.

³¹ The Parties also argued about whether, during the inspection, certain employees could in fact perform the data conversion process. It is not necessary to decide whether those employees could have accurately converted the data at the time of the inspection.

required if you note in the corrosion control procedures established under § 195.402(c)(3) why compliance with all or certain operation and maintenance provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

The Notice alleged that Respondent violated § 195.573(d) by failing to inspect each cathodic protection system on a breakout tank to ensure it meets the criteria in API Recommended Practice 651 (API RP 651). The Notice alleged that in 2009, 2010, and 2011, Respondent used the -850mV criteria to determine if cathodic protection was adequate at certain tanks, but Respondent failed to consider voltage drop (IR drop) for valid interpretation of the measurements. During the OPS inspection, Respondent could not provide documentation to show the Company had measured the IR drop for 27 breakout tanks at various locations in Arkansas.

Respondent did not contest the allegation in the Notice concerning the breakout tanks located in Arkansas.³² Accordingly, PHMSA finds Respondent violated § 195.573(d) by failing to consider IR drop when inspecting cathodic protection systems on 27 breakout tanks in 2009, 2010, and 2011.

The findings of violation in this order will be considered prior offenses in any subsequent enforcement action taken against Respondent.

ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122 (2011), Respondent is subject to an administrative civil penalty not to exceed \$100,000 per violation for each day of the violation, up to a maximum of \$1,000,000 for any related series of violations.³³ The Notice proposed a total civil penalty of \$106,100 for the violations cited above.

In determining the amount of a civil penalty under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, PHMSA 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; the good faith of Respondent in attempting to comply with the pipeline safety regulations; and the effect on Respondent's ability to continue in business. In addition, PHMSA may consider the economic benefit gained from violation and such other matters as justice may require.

³² The Notice referenced some other tanks in Texas and Louisiana, but OPS clarified at the hearing that these tanks were not part of the alleged violation or the proposed penalty.

³³ Subsequent to the actions that gave rise to this case, the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, Pub. L. No. 112-90, § 2(a), 125 Stat. 1905 (Jan. 3, 2012), increased the maximum civil penalty for a pipeline safety violation to \$200,000 per violation for each day up to a maximum of \$2,000,000 for a related series.

Respondent argued that as a general matter the proposed penalty must be withdrawn because Enterprise was not offered an opportunity to confront evidence supporting the penalty amount. Specifically, Respondent complained that it did not have an opportunity to examine either the Agency employee who calculated the proposed penalty or the employee's penalty calculation worksheet. Respondent argued there was "no way to know how the proposed civil penalties were determined" without access to this information.³⁴

At the hearing, OPS explained that as a general matter, the compliance officer who prepares a proposed penalty will attend an enforcement hearing by telephone to answer any questions about the penalty in that case. In this matter, however, the compliance officer had taken another position within the Agency. Therefore, OPS made available another compliance officer who had reviewed the relevant information and who could answer questions about the specific penalty or the process in general. In response to Respondent's request for a copy of internal calculation documentation, the compliance officer explained that it is Agency policy not to release that material.³⁵ OPS did provide a guidance document that explains how the Agency calculates civil penalties under the statutory assessment criteria.³⁶

Having considered Respondent's position, PHMSA finds that Enterprise had access to sufficient information about the penalty to allow a meaningful and targeted response. The assessment factors that influence a civil penalty are listed in § 190.225 and are explained in more detail in the Violation Report. The Violation Report describes the particular facts in this case that were considered under each assessment factor to support the proposed penalty. Respondent had an opportunity to offer any information relevant to the assessment factors, and if appropriate, to disprove any of the factual assertions that influenced the penalty amount.

The guidance document Respondent received also discusses each of the assessment factors, explains the range of penalties that may be assessed under each factor, and explains the type of evidence or facts that will result in higher or lower penalties under each assessment factor. This information corresponds directly to the particular facts of each violation that were noted in the Violation Report. Respondent can discern where the alleged facts of its case fall on the range of conduct and how that influenced the proposed penalty. For these reasons, PHMSA finds Respondent had access to sufficient evidence about the penalty to allow a meaningful response.

³⁴ Post-hearing Brief at 9.

³⁵ See BP Pipelines (North America), Inc., CPF No. 3-2010-5007, at 5, 2012 WL 6946973, at *6 (Dec. 27, 2012) (rejecting an operator's request to receive the "specific penalty calculations used," but providing a copy of the Agency's civil penalty guidelines). See also Administrative Procedures; Updates and Technical Corrections, 78 FR 58897, 58904 (Sept. 25, 2013) (explaining that PHMSA explains its penalty calculation process primarily through the violation report, which defines and applies the assessment factors to the alleged facts of the case).

³⁶ See 78 Fed. Reg. at 58901 (explaining that a general outline of how civil penalties are calculated can be provided upon request).

Item 5: The Notice proposed a civil penalty of \$28,700 for the alleged violation of 49 C.F.R. § 195.402(a). As discussed above, this alleged violation is withdrawn. Therefore, the civil penalty proposed in the Notice for this item is not assessed.

Item 8: The Notice proposed a civil penalty of \$26,200 for Respondent's violation of 49 C.F.R. § 195.505. Respondent failed to include provisions in its OQ program to ensure that individuals measuring cathodic protection with zinc electrodes were qualified.

The proposed penalty was based on assertions in the Notice and Violation Report relevant to the penalty assessment criteria in § 190.225. With regard to the nature of the violation, the Violation Report noted this violation concerned an inadequate program, which is more serious than a records violation, but less serious than a failure of equipment or a pipeline facility. With regard to circumstances, it noted the violation was discovered by PHMSA rather than being self-reported by the Operator. With regard to gravity, the Violation Report suggested there was a low level of gravity because the violation "minimally affected" pipeline integrity or safe operation.

Respondent objected to the gravity rating, arguing there was no rational connection between this rating and the facts. Respondent explained that the zinc electrodes were duplicative measurements and that redundant copper/copper sulfate measurements were also available. Respondent argued the violation had no effect on safety because the operator could use measurements other than the zinc electrodes.

In evaluating Respondent's objection, PHMSA begins by recognizing the Violation Report has alleged the lowest possible level of gravity for this violation. The OQ regulations are designed to ensure covered tasks are performed safely and that abnormal operating conditions are identified. Respondent's failure to comply with the OQ regulations did pose some level of risk because individuals measuring cathodic protection with zinc electrodes could misidentify inadequate cathodic protection. Therefore a civil penalty is appropriate. Respondent's assertion that redundant cathodic protection measurements were available supports the current level of penalty because the violation only "minimally affected" safety as opposed to being a more serious safety violation. Since the proposed penalty already takes into account the low gravity, no further reduction to the penalty is warranted under this factor. The nature, circumstances, and gravity of the violation support the proposed penalty amount.

With regard to the degree of Respondent's culpability and good faith, the Violation Report suggested no reduction to the penalty under these factors.

Respondent contended that it should not be found culpable for the violation because it had redundant copper/copper sulfate electrode measurements available. Respondent also argued that it acted in good faith by identifying the covered task of measuring cathodic protection consistent with industry standards and by reasonably interpreting those standards and the regulation.

When evaluating an operator's culpability, PHMSA considers the extent to which the operator was responsible for the violation.³⁷ Respondent is culpable for the violation in this case because the Company failed to include provisions in its OQ program to ensure individuals measuring cathodic protection with zinc electrodes could, among other things, identify deficient corrosion control with respect the criteria being used. The availability of redundant copper electrodes does not lessen Respondent's culpability for the violation.

When considering good faith in attempting to comply, PHMSA looks at the attempt to comply with the cited regulation prior to the occurrence of the violation.³⁸ If an operator made a clear, demonstrable effort to comply with a reasonable interpretation of the cited regulation when the violation occurred, PHMSA may find it appropriate to reduce the civil penalty.

Respondent's good faith attempt to comply by preparing an OQ program that identified the covered task of measuring cathodic protection is recognized. PHMSA finds, however, that it does not justify a reduction in penalty because Respondent did not take any demonstrable measures to ensure that individuals using zinc electrodes to measure cathodic protection could identify deficient corrosion control. To the extent Respondent believed the regulation did not require individuals to be qualified to identify deficient corrosion control when using zinc reference electrodes, Respondent's interpretation was in error and does not justify reducing the penalty.

With regard to the history of Respondent's prior offenses, the Violation Report noted a total of 27 prior offenses in the five-year period prior to issuance of the Notice. This is a significant number of prior offenses that supports full assessment of the proposed amount.

PHMSA finds the proposed penalty amount is appropriate under the required assessment factors. Accordingly, having reviewed the record and considered the assessment criteria, PHMSA assesses a civil penalty of \$26,200 for the violation of 49 C.F.R. § 195.505.

Item 9: The Notice proposed a civil penalty of \$51,200 for Respondent's violation of 49 C.F.R. § 195.573(d). Respondent failed to consider IR drop when inspecting cathodic protection systems on 27 breakout tanks in 2009, 2010, and 2011.

The proposed penalty was based on assertions in the Notice and Violation Report relevant to the penalty assessment criteria in § 190.225. With regard to the nature of the violation, the Violation Report stated this was a records violation. With regard to circumstances, it noted the violation was discovered by PHMSA.

With regard to gravity, the Violation Report suggested the violation "significantly compromised" pipeline integrity or safe operation. Respondent argued that OPS offered no evidence to support this assertion, but PHMSA finds it is already well-understood that failing to verify adequate

³⁷ Sunoco Pipeline L.P., CPF No. 1-2012-5013, at 12-13, 2014 WL 5431181, at *9 (Aug. 27, 2014).

³⁸ *Id.*

cathodic protection may result in significant safety risks, including corrosion failures that threaten life, property, and the environment.³⁹ The large number of tanks and the extended length of time of these violations support finding that Respondent's failure to verify the adequacy of cathodic protection posed a significant safety threat. Accordingly, the nature, circumstances, and gravity of the violation support the proposed penalty amount.

With regard to the degree of Respondent's culpability and good faith, the Violation Report suggested no reduction to the penalty under these factors.

Respondent contended that it had acted in good faith by having procedures for consideration of IR drop and by having a program for conducting interrupted surveys to measure IR drop. Respondent stated that despite these efforts, certain field personnel did not understand they were supposed to conduct interrupted surveys.

PHMSA does not find Respondent's efforts warrant a reduction to the penalty because Respondent failed to consider IR drop on a large number of tanks at four different terminal facilities over the course of three years. This represents a lapse in compliance for which Respondent's good faith efforts to have procedures do not justify a penalty reduction. The Violation Report also noted 27 prior offenses.

Accordingly, having reviewed the record and considered the assessment criteria, PHMSA assesses a civil penalty of \$51,200 for the violation of § 195.573(d).

In summary, having reviewed the record and considered the assessment criteria for each of the Items cited above, PHMSA assesses Respondent a total civil penalty of **\$77,400**.

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 \$77,400 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.

³⁹ See, e.g., Williams Gas Pipeline Co., CPF No. 1-2009-1007, 2009 WL 7812788 (Nov. 17, 2009) (assessing a penalty for failing to have adequate cathodic protection that resulted in corrosion causing an explosion, fire, hospitalization of persons, and destruction of homes).

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to the violation of § 195.505 (**Item 8**). Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids by pipeline or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601.

Respondent noted that under 49 C.F.R. § 190.217, OPS may only issue a compliance order “if the nature of the violation and the public interest so warrant.”⁴⁰ Respondent argued that OPS has made no demonstration in this case that the nature of the violation and the public interest warrant issuance of a compliance order.

PHMSA has already discussed above the importance of ensuring cathodic protection is measured accurately and deficiencies in corrosion control are identified. Significant accidents can occur on pipelines as a result of inadequate cathodic protection. Therefore, it is necessary to issue an order to require that Respondent comply with § 195.505.

Respondent also asserted that the proposed compliance order is arbitrary and capricious because it goes beyond the scope of the violation. Specifically, Respondent argued that the scope of the violation in Item 8 is limited to the issue of data conversion, but the Notice proposes to require a more expansive program for testing and maintaining zinc reference electrodes.

PHMSA agrees that the violation in Item 8 concerned Respondent’s failure to have a program to ensure individuals were qualified to measure cathodic protection when using zinc reference electrodes. There was no allegation that Respondent violated the regulation by failing to maintain the electrodes. The compliance order is therefore modified to address conduct that resulted in the violation of § 195.505.

Respondent also contended that the proposed compliance order is vague and ambiguous because it requires Enterprise to ensure that each individual “understands” zinc reference electrodes.

PHMSA agrees that some degree of clarification is appropriate. It is essential under Respondent’s OQ program that qualified individuals understand, at a minimum, the difference between zinc reference electrodes and copper reference electrodes when measuring cathodic protection, because data must be converted to determine if measurements are adequate. The compliance order is amended to clarify that qualified individuals must possess this level of understanding.

Accordingly, 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:

⁴⁰ Post-hearing Brief at 45.

1. With respect to the violation of § 195.505 (Item 8), Enterprise must include provisions in its written qualification program to ensure through evaluation that individuals measuring cathodic protection with zinc reference electrodes are qualified. Qualified means that an individual has been evaluated and can measure cathodic protection using zinc electrodes and recognize and react to abnormal operating conditions, including low cathodic protection readings under applicable criteria. The provisions must include the steps necessary to ensure that each qualified individual understands the differences between zinc reference electrodes and copper/copper sulfate reference electrodes, as well as the conversion factors necessary to determine the adequacy of cathodic protection with respect to a copper/copper sulfate reference electrode.
2. Enterprise must submit documentation to demonstrate satisfaction of Paragraph 1 of this Compliance Order within 90 days following receipt of this Order. Submissions must be made to the Director, Southwest Region, Office of Pipeline Safety, 8701 S Gessner, Suite 1110, Houston, TX 77074.
3. It is requested that Enterprise 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.

The Director, Southwest Region, OPS 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.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed \$200,000 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.

WARNING ITEMS

With respect to Items 1, 2, 3, 4, 6, 7, 10 and 11, the Notice alleged probable violations of Part 195, but considered them to be warning items.

Pursuant to 49 C.F.R. § 190.205, a warning may be issued by a Regional Director to notify an operator of a potential issue, which if found in a future inspection may subject the operator to future enforcement. An operator may respond to a warning, but is not required to. The warnings in the Notice were for:

49 C.F.R. § 195.202 (**Item 1**) – Respondent's alleged failure to have documentation of the quality of water used for a hydrostatic test of breakout tank #772. Information on

water quality was needed to demonstrate the tank was constructed in accordance with API Standard 650.

49 C.F.R. § 195.202 (**Item 2**) – Respondent’s alleged failure to have documentation of the metal surface temperature and minimum light intensity used for Vacuum Box testing of breakout tank #772. This information was needed to demonstrate the tank was constructed in accordance with API Standard 650.

49 C.F.R. § 195.565 (**Item 3**) – Respondent’s alleged failure to have documentation of the chemical analysis of sand backfilled underneath breakout tank #772. This information was needed to demonstrate cathodic protection was installed in accordance with API RP 651.

49 C.F.R. § 195.205 (**Item 4**) – Respondent’s alleged failure to have documentation of the metal surface temperature and minimum light intensity used for Vacuum Box testing of breakout tank #741. This information was needed to demonstrate the tank was repaired in accordance with API Standard 650.

49 C.F.R. § 195.402(a) (**Item 6**) – Respondent’s alleged failure to follow its procedures for documenting the date certain forms were submitted to a corrosion supervisor for action. The forms identified cathodic protection deficiencies that needed correction.

49 C.F.R. § 195.404(b)(2) (**Item 7**) – Respondent’s alleged failure to maintain daily operating records that included documentation of an abnormal operation that occurred on May 3, 2012. The abnormal operation was created during the OPS inspection by testing a gas detector.

49 C.F.R. § 195.573(d) (**Item 10**) – Respondent’s alleged failure to test cathodic protection reference electrodes underneath the bottom of breakout tank #1305. Respondent had allegedly only tested the tank’s perimeter.

49 C.F.R. § 195.581(a), (b) (**Item 11**) – Respondent’s alleged failure to clean and coat several bolts, nuts, and a collection pipe using a coating material suitable for the prevention of atmospheric corrosion. The areas were allegedly observed to have coating deterioration and rust.

Respondent is warned that if a probable violation of these provisions is identified in the future, Respondent may be subject to additional enforcement.

Under 49 C.F.R. § 190.243, Respondent may submit a petition for reconsideration of this Final Order to the Associate Administrator for Pipeline Safety, PHMSA, 1200 New Jersey Avenue SE, East Building, 2nd Floor, Washington, D.C. 20590, no later than 20 days after receipt of the 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 filing of a petition automatically stays the payment of any civil penalty assessed. All other 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.

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Date Issued