



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

FEB 16 2006

Craig O. Pierson  
Vice President of Operations  
Marathon Ashland Pipe Line LLC  
539 South Main St.  
Findlay, OH 45840-3229

Re: CPF No. 5-2003-5013

Dear Mr. Shaw:

Enclosed is the Final Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It makes a finding of violation and finds that you have completed the actions specified in the Notice required to comply with the pipeline safety regulations. The Final Order also finds that you have addressed the inadequacies in your procedures that were cited in the Notice of Amendment. This case is now closed. Your receipt of the Final Order constitutes service under 49 C.F.R. § 190.5.

Sincerely,

James Reynolds  
Pipeline Compliance Registry  
Office of Pipeline Safety

Enclosure

**VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

**DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, DC 20590**

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**In the Matter of** )

**Marathon Ashland Pipe Line, LLC,** )

**Respondent** )  
\_\_\_\_\_ )

**CPF No. 5-2003-5013**

**FINAL ORDER**

On October 28–31, 2002, pursuant to 49 U.S.C. § 60117, a representative of the Office of Pipeline Safety (OPS), Research and Special Programs Administration (RSPA), conducted an on-site pipeline safety inspection of Respondent's Red Butte Pipe Line facilities from Silver Tip, Montana, to Casper, Wyoming, and Respondent's manuals and records at its Powell and Chatham, Wyoming offices.<sup>1</sup> As a result of the inspection, the Director, Western Region, OPS, issued to Respondent, by letter dated May 29, 2003, a Notice of Probable Violation, Proposed Compliance Order, and Notice of Amendment (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Respondent had committed a violation of 49 C.F.R. Part 195 and proposed that Respondent take certain measures to correct the alleged violation. The Notice also proposed, in accordance with 49 C.F.R. § 190.237, that Respondent amend its procedural manual for operations, maintenance and emergencies (OM&E).

After requesting and receiving an extension of time to respond, Respondent responded to the Notice by letter dated July 18, 2003 (Response). Respondent contested several of the allegations, offered information in explanation of the allegations, and provided information concerning the corrective actions it has taken. Respondent initially requested a hearing; but withdrew its request by letter dated June 23, 2004. Respondent submitted additional information concerning the corrective actions it has taken by letter dated October 19, 2004.

**FINDING OF VIOLATION**

Item 3 in the Notice alleged that Respondent violated 49 C.F.R. § 195.571 by failing to properly

<sup>1</sup> The Norman Y. Mineta Research and Special Programs Improvement Act, Pub. L. No. 108-426, 118 Stat. 2423 (2004), created the Pipeline and Hazardous Materials Safety Administration (PHMSA) and transferred the authority of RSPA exercised under chapter 601 of title 49, United States Code, to the Administrator of PHMSA. See also 70 Fed. Reg. 8299, 8301-8302 (2005).

consider voltage drop when measuring cathodic protection levels on the Red Butte Pipe Line. The Notice alleged that Respondent used a -850 mV criterion to conduct its 2002 cathodic protection survey, but used an unacceptable method of considering voltage drop.

In its Response, Respondent contended that it complied with the requirements of 49 C.F.R. § 195.571 by using acceptable methods for considering voltage drop, including methods recognized by NACE Standard RP0169-96. To support its claim, Respondent submitted sections of its written procedures, inspection and testing reports, accounts of its corrosion control programs, and other relevant documentation.

Section 195.571 requires Respondent to ensure that its cathodic protection systems comply with one or more of the applicable criteria contained in paragraphs 6.2 and 6.3 of NACE Standard RP0169-96. Section 6.2 of the Standard lists the -850 mV criterion for determining whether adequate levels of cathodic protection have been achieved. It also states that "voltage drops . . . must be considered for valid interpretation of this voltage measurement." The record shows that Respondent used a -850 mV criterion to determine the adequacy of its cathodic protection system during its 2002 annual cathodic protection survey. Accordingly, under § 195.571, Respondent must determine the significance of voltage drop in accordance with NACE Standard RP0169-96.

Respondent's procedural Standard No. MPLMNT-073 states that Respondent is to consider voltage drop to interpret the potential or voltage measurement when using an "on" criterion, such as the -850 mV criterion. Respondent's procedures list a number of methods for considering voltage drop. Several of those methods are identical to those identified in NACE Standard RP0169-96 for determining voltage drop significance. Despite Respondent's written procedures, however, there is no indication that Respondent utilized any of those methods listed in its procedures during the 2002 cathodic protection survey. The record shows that Respondent used an IR free (IRF) reading during the 2002 survey, but the IRF reading alone is not an accepted method for determining the significance of voltage drop, because the IRF reading is a pipe-to-soil potential reading taken on the ground surface directly above the pipeline with the cathodic protection rectifiers operating uninterrupted. When the reading is taken with the rectifier operating uninterrupted, the volt meter may not accurately discern the difference between the potential voltage and the IR voltage. This can cause the reading to appear more negative than the potential reading alone. Therefore, the IRF reading alone is not an accurate or acceptable method for determining the significance of voltage drop.

The record shows that Respondent also considered voltage drop during individual pipeline inspections, noted on Respondent's "Land and Pipe Management Reports." However, these reports are inconclusive to show that Respondent utilized an accepted method for determining voltage drop significance. The reports do not indicate the criterion that had been used to consider voltage drop. In addition, the reports were not completed as part of a cathodic protection survey; rather they were completed during separate and distinct inspections at individual sites along the pipeline.

In its response, Respondent further contended that it used the 100 mV criterion at various locations along the pipeline during 2001 and 2002. According to Respondent, this method

enabled Respondent to consider voltage drop by direct measurement calculations. While section 6.2 of the NACE Standard RP0169-96 recognizes the 100 mV criterion as an acceptable method to determine the adequacy of cathodic protection, Respondent did not document use of this method on the entire pipeline. Respondent's test records show that Respondent used the 100 mV criterion at isolated locations along the line. Therefore, Respondent's use of the 100 mV criterion did not determine the adequacy of Respondent's cathodic protection or the significance of voltage drop for the entire pipeline.

Respondent provided documentation that it had installed a number of metal coupon test stations. These test stations are capable of measuring soil potentials with the cathodic protection current interrupted. The coupon test stations appear to be acceptable methods for considering voltage drop; but Respondent had not installed the coupons at every test station on the line.

While Respondent has taken a number of steps to consider voltage drop and determine the adequacy of its cathodic protection system, I find Respondent failed to document the use of an accepted method to consider the significance of voltage drop on the entire Red Butte Pipe Line. Accordingly, I find that Respondent violated 49 C.F.R. § 195.571 as alleged in the Notice.

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 3 of the Notice. 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, Western Region, OPS has indicated that Respondent has taken the following actions specified in the Proposed Compliance Order:

Respondent implemented a new format for annual cathodic protection surveys that documents the criterion, targets and actual readings to assure that IR drop consideration is completed and documented. Respondent developed target "on" readings for each test station and completed a comprehensive cathodic protection survey.

Accordingly, since compliance has been achieved with respect to this violation, it is not necessary to include the compliance terms in this Order.

#### **AMENDMENT OF PROCEDURES**

Item 1 in the Notice alleged inadequacies in Respondent's OM&E manual and proposed to require amendment of Respondent's procedures to comply with the requirements of 49 C.F.R. §§ 195.402(f) and 195.55.

Section 195.402(f) requires Respondent to have procedures for personnel to recognize safety-related conditions subject to reporting under § 195.55. Surges in pipeline pressure in excess of

110% of the maximum operating pressure is a safety-related condition that must be reported in accordance with § 195.55. The Notice alleged that Respondent's procedures listed this condition as an abnormal operation, not a reportable safety-related condition.

In its Response, Respondent admitted that its "Standard Procedures" listed the condition as an abnormal operation, but argued that another portion of its OM&E manual titled "Safety-Related Conditions" listed the condition as a safety-related condition in accordance with § 195.402(f). Therefore, Respondent contended, it complied with § 195.402(f) and the inadequacy alleged in the Notice should be withdrawn.

Although Respondent properly listed the condition as a reportable safety-related condition, the condition was also listed elsewhere in its OM&E manual as an abnormal operation. Respondent had not cross-referenced the two sections. Were personnel to consult "Standard Procedures" only, they would recognize the condition as an abnormal operation, rather than a reportable safety-related condition. Respondent agreed that clarification and cross-referencing would be beneficial.

Respondent submitted copies of its amended procedures, which the Director, Western Region, OPS, reviewed. Based on the results of this review, I find that Respondent's original procedures as described in the Notice were inadequate to ensure safe operation of its pipeline system, but that Respondent has corrected the identified inadequacies. Therefore, no need exists to issue an order directing amendment.

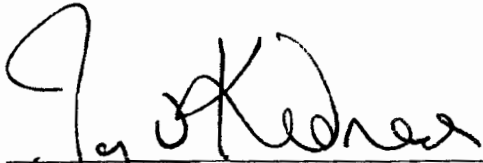
#### WARNING ITEM

The Notice did not propose a civil penalty or corrective action for Item 2 of the Notice, but warned Respondent that it should take appropriate corrective action to correct the item. The warning was for:

49 C.F.R. § 195.569 – failing to examine exposed portions of buried pipeline for evidence of external corrosion.

In its Response, Respondent presented information showing that it has addressed this item. Respondent is again warned that if OPS finds a violation for the cited item in a subsequent inspection, enforcement action will be taken.

The terms and conditions of this Final Order are effective on receipt.

  
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 Stacey Gerard  
 Associate Administrator  
 for Pipeline Safety

11/16/16

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 Date Issued