Mr. Michael N. Mears
President and Chief Executive Officer
Magellan Midstream Partners, LP
Magellan Pipeline Company, LP
One Williams Center
Tulsa, OK 74172

Re: CPF No. 4-2012-5010

Dear Mr. Mears:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation, assesses a civil penalty of $149,800, 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, OPS
Ms. Bizunesh Scott, Steptoe & Johnson LLP
1330 Connecticut Ave. NW, Washington, D.C. 20036

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
FINAL ORDER

Between March 22, 2010, and April 22, 2011, 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 Magellan Pipeline Company, LP (Magellan or Respondent) in Oklahoma and Texas.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 March 23, 2012 (Notice). In accordance with 49 C.F.R. § 190.207, the Notice alleged Magellan committed four violations of the hazardous liquid pipeline safety regulations, proposed a civil penalty of $149,800, and proposed corrective action to be taken. The Notice also included seven warning items.

Magellan responded by requesting a hearing on April 27, 2012, and then submitted a supplemental response dated August 17, 2012 (Supp. Response). In accordance with 49 C.F.R. § 190.211, a hearing was held on August 28, 2012, in Houston, Texas, before the Presiding Official from the Office of Chief Counsel, PHMSA. After the hearing, Magellan submitted a post-hearing brief dated October 29, 2012 (Brief).

FINDINGS OF VIOLATION

The Notice alleged that Respondent committed four violations of the pipeline safety standards in 49 C.F.R. Part 195, as follows:

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

---

¹ Magellan is a subsidiary of Magellan Midstream Partners, LP, and operates approximately 10,000 miles of pipeline primarily transporting refined petroleum products in Kansas, Texas, Oklahoma, and other west-central states, as reported for the 2013 calendar year pursuant to § 195.49.
§ 195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?

(a) You must electrically isolate each buried or submerged pipeline from other metallic structures, unless you electrically interconnect and cathodically protect the pipeline and the other structures as a single unit.

The Notice alleged that Respondent violated § 195.575(a) by failing to electrically isolate buried pipelines from metallic casings. Specifically, the Notice alleged that Respondent failed to remedy “shorted casings” at various units over a number of years, including units at Longhorn, Duncan to Ft. Smith, Cimarron Pipeline, Orion West, Oklahoma City, and Tulsa. In addition, the Notice alleged that Respondent did not follow its written procedures to address metallically shorted casings, and did not have procedures to address electrolytically shorted casings.

In its written submissions and at the hearing, Magellan responded that the alleged violation should be withdrawn because § 195.575(a) does not require operators to remedy or “clear” shorted casings. Respondent also argued that the evidence does not support the allegation that Magellan failed to follow its procedures, or that there is even a requirement to have procedures for clearing shorted casings.

PHMSA first considers Respondent’s argument that § 195.575(a) does not require operators to electrically isolate their pipelines from metallic casings. If the standard does require electrical isolation from casings, as alleged in the Notice, then PHMSA must determine whether Respondent complied with that standard.

A. Safety Standards

In matters of regulatory application, PHMSA begins by examining the plain language of the rule. The text of a regulation is controlling, but the Agency may consider other administrative material to ensure consistent application of its rules. Administrative material may include prior enforcement cases, guidance documents, regulatory history, and other material, if relevant.

(1) Regulatory language

Section 195.575(a) requires operators with cathodic protection systems to electrically isolate each buried pipeline from other metallic structures, unless the operator interconnects and cathodically protects the pipeline and other structure as a single unit.

Cathodic protection systems are used by pipeline operators to protect steel pipelines from external corrosion. A cathodic protection system with an impressed current prevents external corrosion by applying a direct electric current to the metal of the pipeline in an amount sufficient to prevent metal loss to the surrounding environment. Operators must maintain a minimum

---

2 § 195.563.

level of cathodic protection to protect their pipelines. Any deficiency identified in the corrosion control must be corrected. Deficiencies in corrosion control may arise when cathodically protected pipelines are adjacent to other metallic structures. The deficiency results when current from the cathodic protection system gets diverted from the pipeline to the foreign structure.

A pipeline casing is typically a larger diameter steel pipe that surrounds the pipeline transporting hazardous liquid. A casing can be used to protect a pipeline from stresses imposed on the pipe, such as when the line is buried beneath a highway or railroad. The inside of the casing is generally lined with spacing material so the pipeline does not touch the casing, and the ends of the casing are sealed to prevent water from entering. A steel casing that surrounds a pipeline with cathodic protection may become “shorted,” which means the casing is no longer electrically isolated from the pipeline and current is leaving the pipe for the casing. There are generally two types of shorted casings. A metallically shorted casing is caused by physical contact between the casing and the carrier pipe, which may be caused by movement of the pipe inside the casing or failure of spacing material. An electrolytically shorted casing is caused by ionic contact between the casing and carrier pipe via some electrolyte, such as water that has entered the casing.

By definition, a steel casing is a metallic structure. Section 195.575(a) requires operators to ensure their buried pipelines are electrically isolated from “other metallic structures.” The regulation does not explicitly exclude casings or any other type of metallic structure from this requirement.

Accordingly, PHMSA finds that a plain reading of the regulation requires operators to electrically isolate buried pipelines from other metallic structures, including metallic casings, unless the pipeline and casing are electrically interconnected and cathodically protected as a single unit. PHMSA also reviews the applicable administrative material, including material cited by Respondent, to ensure this plain reading is consistent with other applications of the rule.

(2) Enforcement history

In prior enforcement cases that involved shorted casings under § 195.575, PHMSA determined that shorted casings are not in compliance with the regulation. In July 2012, PHMSA issued a final order finding a violation of § 195.575 where cathodic protection tests demonstrated the operator had a metallic short. In that case, PHMSA found the shorted casing proved the operator had failed to electrically isolate its pipeline, among other violations of § 195.575.

Likewise, in May 2005, PHMSA issued a final order finding a violation of § 195.575(a) based on evidence from cathodic protection tests demonstrating a shorted casing was present. Both the

---

4 § 195.571.
5 § 195.573(e). See also § 195.401(b) (requiring operators to correct any discovered condition that could adversely affect the safe operation of a pipeline system).
6 Alyeska Pipeline Serv. Co., CPF 5-2005-5023, Items 10(a) and 10(b), 2009 WL 7810542 (July 28, 2009) (“Electrically shorted casings may interfere with cathodic protection and result in inadequate protection.”).
casing vent and settlement rod readings indicated a pipe-to-soil potential of -1.25 volts, suggesting the casing or casing test lead was in electrical contact with the carrier pipe. PHMSA determined the operator had violated § 195.575(a) by failing to electrically isolate the buried pipeline from other metallic structures.

Magellan cited an enforcement case that it believed supported the contrary view that § 195.575 does not require operators to remedy shorted casings.9 In the case cited by Magellan, PHMSA issued a warning to an operator for failing to inspect shorted casing vents every six months as required by the company’s written procedures. In that case, PHMSA warned that a failure to follow written procedures was a probable violation of § 195.402(a). Magellan argued this demonstrates PHMSA has allowed an alternative to clearing shorted casings.

PHMSA finds the case cited by Respondent has limited applicability because the case concerned compliance with a different regulation than is at issue in the present matter. The issue in that case was whether the operator followed its own written procedures as required by § 195.402(a). The case did not address compliance with § 195.575; nor did it find any conduct to be permissible or prohibited under § 195.575.

In prior cases that explicitly addressed shorted casings under § 195.575, PHMSA determined that shorted casings do not comply with the regulation. Accordingly, having reviewed prior applications of § 195.575, PHMSA finds a plain reading of the regulation is consistent with the prior enforcement history.

(3) Administrative guidance

Magellan argued further that administrative “guidance developed at the time this regulation became effective and in effect during the inspections in this case” demonstrates that § 195.575 does not require operators to remedy shorted casings.10 Respondent contended that under that guidance, PHMSA considers pipelines to be protected if an electrolytic short is present. Respondent also contended that the guidance established various methods to comply with the regulation besides merely clearing the short.

PHMSA has developed inspection and enforcement guidance for § 195.575 that discusses, among other things, the cathodic protection of pipelines inside metallic casings.11 It is not clear if Respondent was referring to this guidance or some other document, because Respondent did not cite the guidance by name, publication date, or location where it could be accessed, and did not submit a copy as evidence.12

---

The inspection and enforcement guidance issued by PHMSA for § 195.575 notes that casings are electrically isolated because otherwise they can drain current away from the carrier pipe. The guidance also states that once a shorted casing is identified, “the operator should determine a course of action to correct or negate the adverse effects . . . within six months.” It also states that shorts “should be removed since they could reduce the effectiveness of [cathodic protection] to not only the carrier pipe in the casing but to the line pipe on either side of the casing.”

Although this guidance is informational and may not constitute the basis for a violation by itself, the guidance is consistent with the conclusion that § 195.575(a) requires operators to correct shorted casings or negate the adverse effects by cathodically protecting the pipeline and structure as a single unit. In fact, the guidance states that a violation of § 195.575(a) likely occurs if an operator fails to timely initiate corrective action upon discovery of a shorted casing.

Having reviewed the relevant administrative guidance material, PHMSA finds it is consistent with the reading of § 195.575(a).

(4) Regulatory history

Magellan cited the regulatory history of § 195.575 in support of its position that shorted casings are not required to be remediated. Respondent argued that rulemaking documents show PHMSA intentionally omitted any “measures to remedy shorted casings.”

In December 2000, PHMSA issued a notice of proposed rulemaking to revise the corrosion control standards for hazardous liquid pipelines. In the notice, PHMSA explained that the proposed standards were “identical to present corrosion control requirements in Part 195 [for hazardous liquid pipelines] and standards that are substantially like present requirements in Part 192 [for gas pipelines].”

The version of § 195.575(a) proposed by PHMSA was based on a comparable provision in § 192.467(a), which requires gas pipeline operators to electrically isolate their pipelines from other metallic structures. Section 192.467(c) of the gas regulations, which PHMSA did not propose to include in § 195.575, requires that “each pipeline be electrically isolated from metallic casings.” PHMSA stated that it was not including a provision like § 192.467(c) in the proposal because the safety need to clear shorted casings was not apparent. Magellan argued “it

---

13 Corrosion Enforcement Guidance at 52.
14 Corrosion Enforcement Guidance at 53.
15 OPS also included as evidence another guidance document, Guidelines for Integrity Assessment of Cased Pipe for Gas Transmission Pipelines in HCAs. Violation Report, Exhibit 1-15, available at http://primis.phmsa.dot.gov/gasimp/techreports.htm. This guidance concerns different requirements for gas pipelines, but does refer to shorted casings as “immediate” and “scheduled” priorities.
is reasonable to infer that the absence of a similar provision in § 195.575 means that there is not a regulatory requirement to isolate casing[s] under § 195.575.”19

PHMSA has considered the preamble to the notice of proposed rulemaking and agrees the proposed rule did not indicate an intent to include a provision identical to § 192.467(c). The final rule, however, adopted regulatory language for hazardous liquid pipelines that covers all metallic structures without exception. The final rule did not differentiate between casings and any other type of metallic structure that must be electrically isolated from pipelines.20 In the event of any perceived inconsistency between the text of the final rule and a statement in the preamble of the proposed rule, the text of the final rule must control. Moreover, after adoption of the final rule, PHMSA has issued at least two enforcement cases that concluded § 195.575(a) requires operators to electrically isolate hazardous liquid pipelines from metallic casings. Therefore, PHMSA rejects Respondent’s argument that the regulatory history requires a different application of the regulation.

(5) Other research materials

Finally, the Notice alleged that “[r]esearch on corrosion of cased pipes supports the need to achieve electrical isolation between the carrier pipe and casing.”21 As support for this assertion, OPS produced two research documents prepared by third-parties.

Magellan responded that it was not taking a position on the research, but noted that none of the reference materials suggested operators must take specific actions to address shorted casings.22

The first report, Statistical Analysis of External Corrosion Anomaly Data of Cased Pipe Segments, studied the significance of corrosion damage on cased pipelines.23 One of the conclusions after evaluating thousands of casings was that “shorted casings are significantly more susceptible to corrosion than non-shorted casings.”24 Particularly with metallically shorted casings, the study noted that “a metallic short does increase the chances of external pipe corrosion and thus, shorted casings should be considered to receive prioritization for integrity assessment.”25

21 Notice at 3.
23 Violation Report, Exhibit 1-14. The report was prepared for INGAA Foundation, Inc. by Southwest Research Institute (Dec. 2007).
24 Statistical Analysis at 33.
25 Statistical Analysis at 16.
The second document, *Research Efforts for Addressing Cased Pipeline Integrity Management*, echoed the findings of the *Statistical Analysis* study. It also referred to metallic shorts as “severe” and electrolytic shorts as “moderate” issues requiring action.

While these reference materials do not control the application of § 195.575, they are informative about the risks to pipeline safety posed by shorted casings and the need to address them to prevent pipeline failures caused by corrosion.

In conclusion, on the issue of whether shorted casings must be addressed under § 195.575(a), PHMSA finds the plain reading of the regulation requires operators to electrically isolate each buried pipeline from other metallic structures, including metallic casings, unless the pipeline and casing are electrically interconnected and cathodically protected as a single unit. The relevant enforcement history and administrative guidance material that have been issued since the final regulation was adopted are consistent with this reading.

**B. Analysis and Findings**

The Notice alleged that Respondent violated § 195.575(a) by failing to electrically isolate buried pipelines from metallic casings, and they were not electrically interconnected and cathodically protected as a single unit.

It was not disputed at the hearing or in the written submissions that Respondent’s pipeline system had multiple metallically and electrolytically shorted casings over a number of years. By definition, shorted casings are not electrically isolated from the pipeline because the short involves current being diverted or shielded from the pipeline. Therefore, the pipelines in question were not electrically isolated.

As to whether the pipelines and casings were electrically interconnected and cathodically protected as a single unit, the Notice alleged that none of the casings were intentionally bonded to a carrier pipe or connected to the cathodic protection system in a manner that cathodically protected the pipe and casing as a single unit. The Notice further alleged Respondent never intended to protect the pipes and casings together as a unit.

In its written submissions and at the hearing, Respondent argued that an electrolytically shorted casing is essentially electrically interconnected and cathodically protected. Respondent explained that Magellan does not intentionally short casings, but an electrolytically shorted casing can be considered the same as being electrically interconnected. (Respondent did not

---

26 Violation Report, Exhibit 1-17. The document was prepared by Pipeline Research Council International, Inc. for a PHMSA workshop (Jul. 14, 2008).

27 *Research Efforts* at 7.

28 *See* Violation Report, Exhibits 1-4 through 1-13 (containing annual cathodic protection survey data for Respondent’s pipeline facilities primarily for years 2005 through 2009).


30 Respondent did not contend that it *intentionally* bonded pipe and casings as a single unit.
contend that a *metallically* shorted casing was electrically interconnected and cathodically protected.)

At the hearing, OPS argued that allowing a previously isolated casing to lapse into a shorted condition is not an electrical interconnection under the regulation. OPS explained that intentionally protecting the structures as a single unit would be accomplished using a wire for the electrical connection. OPS agreed with Respondent that if a short is caused by water entering the annulus of the casing, current will travel through the electrolyte. But if the electrolyte does not surround the entire pipe, some areas of the pipe may not get any protection. Also, OPS stated the presence of water constitutes a more corrosive environment, resulting in a higher risk of corrosion especially when there is reduced protection from the short.

Having considered the information presented by both parties, PHMSA concludes that a shorted casing is not equivalent to a pipeline and casing being electrically interconnected and cathodically protected as a single unit under § 195.575(a). An electrolytically shorted casing caused by the presence of water in the annulus may result in limited areas of electrical connection, which is different than a system purposefully designed and controlled to ensure the pipe receives the intended level of protection over its entire surface. Therefore, PHMSA rejects Respondent’s argument that an electrolytically shorted casing complies with § 195.575(a).

Respondent’s annual cathodic protection survey records demonstrate the shorted casings were not electrically isolated. The evidence also shows Respondent did not electrically interconnect and cathodically protect them as a single unit. Accordingly, PHMSA finds Respondent violated § 195.575(a) by failing to electrically isolate each buried pipeline from other metallic structures.31

**Item 2:** The Notice alleged that Respondent violated 49 C.F.R. § 195.410, which states in part:

§ 195.410  **Line markers.**

  (a) Except as provided in paragraph (b) of this section, each operator shall place and maintain line markers over each buried pipeline in accordance with the following:

  (1) Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known.

The Notice alleged that Respondent violated § 195.410 by failing to place line markers over each buried pipeline at public road crossings, railroad crossings, and in sufficient number along the remainder of the pipeline so that its location is accurately known. The Notice also alleged that Respondent did not follow its written procedures to effectively delineate the pipeline corridor. The Notice listed 45 locations, including road and railroad crossings and other areas where there were allegedly inadequate pipeline markers to ascertain the location of the pipeline. OPS alleged that at each of those locations, inspectors walked in various directions at the pipeline right-of-

31 The Notice also alleged that Respondent did not follow its procedures. It is not necessary to reach a conclusion on this issue because Respondent’s cathodic protection records prove a violation of § 195.575(a).
way but could not identify the path of the pipeline through observation of pipeline markers even when turning to look 360 degrees. OPS included photographs of the rights-of-way taken during the inspection.

In its written submissions and at the hearing, Respondent argued that § 195.410 does not require pipeline markers to be placed in sufficient number so they can be viewed by looking 360 degrees. Respondent argued that such a “360-degree test” is not mandated by the regulation and is also indistinguishable from the “line of sight test” rejected by PHMSA in prior enforcement cases. Respondent also argued that evidence in this case was not presented to Magellan in a manner that allowed for meaningful rebuttal.

A. Safety Standards

Section 195.410 requires operators to have above-ground line markers in the area of their pipelines. The markers must include the words “Warning,” “Caution,” or “Danger” followed by “Petroleum (or the name of the hazardous liquid transported) Pipeline,” the name of the operator, and a telephone number where the operator can be reached at all times. With some exceptions, line markers must be placed and maintained at each public road crossing, at each railroad crossing, and “in sufficient number along the remainder of each buried line so that its location is accurately known.”

This regulation contains both prescriptive and performance-based requirements. The prescriptive requirements tell operators exactly where certain line markers must be placed: at each public road crossing and at each railroad crossing. The performance-based requirement tells operators that markers must also be placed in “sufficient” number along the remainder of each buried line so that its location is “accurately known.” The regulation does not establish a minimum number of markers or maximum distance between markers along the pipeline. Rather than establish a uniform distance for markers, the rule provides flexibility for operators to mark their pipelines in a manner appropriate for their system as long as the location of the pipeline is “accurately known” from the markers.

In previous enforcement cases involving § 195.410, PHMSA took a cautious approach to gauging compliance with the performance-based requirement. In 2008, PHMSA began reexamining the “line-of-sight” test used by some inspectors to check if markers were sufficient in number. The line-of-sight test had been used primarily at cultivated agricultural fields and valve sites. An inspector would stand at a valve site or at one end of a cultivated field and observe whether the operator’s next line marker could be seen when looking in both directions. Between 2008 and 2011, PHMSA withdrew a number of alleged violations of § 195.410 where line-of-sight was the basis for the alleged violation.33

32 See, e.g., Tennessee Gas Pipeline Co., CPF 4-2012-1020, Item 1, 2013 WL 8284480 (Dec. 26, 2013) (discussing performance-based regulations in the context of a requirement to have “sufficient” test stations to determine the adequacy of cathodic protection).

Magellan argued that PHMSA has explicitly rejected the line-of-sight test and therefore any “360-degree test” must also be rejected as they are indistinguishable.\textsuperscript{34}

PHMSA disagrees that line-of-sight was explicitly rejected. PHMSA did withdraw a number of alleged violations that were based on line-of-sight, but PHMSA made clear the withdrawals were due to a reexamination of the test and that “no decision” had been made “whether or how [line-of-sight] should be applied.”\textsuperscript{35} PHMSA also clarified that the “withdrawal neither constitutes an interpretation of § 195.410(a)(1) nor prejudices future potential enforcement action.”\textsuperscript{36} During the same time period PHMSA continued to find violations of § 195.410 in other cases that did not explicitly implicate line-of-sight.\textsuperscript{37} The manner in which line-of-sight was addressed in prior enforcement actions does not preclude enforcement of § 195.410 in this case, regardless of the manner in which OPS inspectors observed Magellan’s pipeline.

Respondent also argued that § 195.410 does not require pipeline markers to be placed in sufficient number so that they can be viewed by looking 360 degrees and that a “360-degree test” is not mandated by the regulation.

At the hearing, OPS contended that its inspectors did not employ a “360-degree test,” but rather used the terminology “even when turning 360 degrees” in the Notice to describe how the inspectors examined the right-of-way. In other words, the inspectors walked in different directions but did not see markers to decipher the location of the pipeline when looking in all directions.

Having considered the positions of the parties, PHMSA concludes that the inspectors appropriately used normal senses of visual perception to observe whether markers were placed in the area of Respondent’s pipeline. Since § 195.410 requires markers to be placed “in sufficient number along the [pipeline] so that its location is accurately known,” inspectors must be able to use normal methods of observation to see if markers are present and to discern the location of the pipeline. In this case, inspectors were walking around and looking in all directions to see where pipeline markers were located. There is nothing inappropriate about this method of evaluating compliance with § 195.410.

\textsuperscript{34} Brief at 13.
\textsuperscript{35} E.g., Enterprise Products, CPF 4-2007-5015, Item 2.
\textsuperscript{36} E.g., Enterprise Products, CPF 4-2007-5015, Item 2.
B. Analysis and Findings

PHMSA evaluates whether Respondent complied with § 195.410 by reviewing the evidence to determine if Respondent had line markers over each buried pipeline at public road and railroad crossings and in sufficient number along the remainder of each buried line so that its location is accurately known.

As with any performance standard, it is inherent that operators evaluate their own conduct under the rule to determine whether they have satisfied the minimum standard. It is also inherent that operators be able to demonstrate their conduct complies with the minimum standard. At the hearing, Respondent argued that it could not demonstrate compliance without knowing what standard PHMSA uses to evaluate compliance.

PHMSA notes that the text of the regulation provides the minimum standard: operators must ensure the location of their pipeline can be accurately known from the markers placed along the line. If the location of the pipeline cannot be accurately known from the markers, the operator is not likely to be in compliance with the minimum standard.

Evidence in the record demonstrates there were locations on Respondent’s pipeline system that did not have enough markers to accurately know the location of the pipeline. Approximately 60 photographs from the OPS inspection show areas where there are no visible line markers to indicate the path of the pipeline. The inspector explained at the hearing that he actively tried to locate markers by walking around and looking for them, but the location of the pipeline could not be determined by observing markers in these areas.

Respondent argued that the photographic evidence taken at the time of the inspection was not presented to Magellan in a manner that allowed for meaningful rebuttal. Specifically, Respondent contended the photographs were taken in 2010, but were not provided to Magellan until June 1, 2012, preventing the Company from challenging whether the alleged conditions actually existed in 2010. In addition, Respondent argued that OPS never articulated the camera settings used to take the photographs.

At the hearing, the inspector explained that several Magellan personnel accompanied him on the inspection when the pictures were taken. They also participated in pre-inspection and post-inspection review meetings during which line marker issues were discussed. Testimony at the hearing confirmed that the photographs were taken with standard camera settings.

Having reviewed the record, PHMSA finds no basis for Respondent’s contention that it was not able to provide meaningful rebuttal to the allegations. The Notice identified each of the 45 locations where adequate markers were allegedly not present. Respondent was free to present evidence at the hearing that those locations had sufficient markers to accurately know the location of the pipeline.

---

38 Tennessee Gas Pipeline Co., CPF 4-2012-1020, Item 1.
Accordingly, PHMSA finds Respondent violated § 195.410 by failing to place line markers over each buried pipeline at public road crossings, railroad crossings, and in sufficient number along the remainder of the pipeline so that its location is accurately known.39

**Item 4:** The Notice alleged that Respondent violated 49 C.F.R. § 195.406(a) and (b), which states in part:

§ 195.406  Maximum operating pressure.

(a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following:

1. The internal design pressure of the pipe determined in accordance with § 195.106 . . . .

2. The design pressure of any other component of the pipeline.

3. Eighty percent of the test pressure for any part of the pipeline which has been pressure tested under subpart E of this part.

4. Eighty percent of the factory test pressure . . . for any individually installed component which is excepted from testing under § 195.305.

5. For pipelines under §§ 195.302(b)(1) and (b)(2)(i) that have not been pressure tested under subpart E of this part, 80 percent of the test pressure or highest operating pressure to which the pipeline was subjected for 4 or more continuous hours . . . .

(b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

The Notice alleged that Respondent violated § 195.406(a) by operating pipelines at a pressure exceeding their maximum operating pressure (MOP). Specifically, the Notice alleged that company records from 2007 through 2011 show Magellan allowed its pipeline system to operate above MOP for durations in excess of ten minutes on at least 17 occasions. In addition, the Notice alleged that Respondent violated § 195.406(b) at the Ponca City facility where pressure exceeded 110% of MOP due to an incorrect setting on a pressure relief valve.

With regard to the alleged violation of § 195.406(b), Respondent did not contest that pressure exceeded 110% of MOP on that occasion. Respondent explained the event was a result of thermal pressure increasing on a shutdown pipeline. Pressure reached 135% of MOP because the relief pressure was incorrectly set at a value much higher than it should have been.

Respondent contested the alleged violation of § 195.406(a), and argued that exceeding MOP was permitted under the regulation as “variations from normal operations.” Respondent explained that it does not allow pressure above MOP for any amount of time; rather, it takes immediate

---

39 The Notice also alleged Respondent did not follow procedures to delineate the pipeline corridor. It is not necessary to reach a conclusion on this issue because the photographs and testimony prove a violation of § 195.410.
action to reduce pressure. Respondent stated a pressure excursion above MOP triggers an alarm and requires the controller to take immediate action to reduce pressure, which may include shutting down units. If the corrective measures do not result in pressure being brought under MOP after ten minutes, an additional alarm is triggered and Respondent logs the event as an abnormal operating condition for further analysis to prevent reoccurrence. The second alarm does not change the controller’s actions that are already underway to reduce pressure. The ten minute interval, Respondent explained, is based on how long it typically takes pressure to settle after start up.

With regard to the 17 specific events in question, Respondent contended that thirteen were attributed to thermal pressure increase in idle lines, two were related to the malfunction of a component that failed to control pressure as designed, one event was attributed to personnel error where a block valve was misaligned, and the final event occurred during startup. Respondent argued that none of the events were caused by intentionally exceeding MOP.

At the hearing, OPS contended that the durations of the excursions were not the type of temporary pressure spikes permitted by the regulation for surges and other variations from normal operations. OPS also contended that the multiple events of pressure exceeding MOP for more than 10 minutes demonstrate Respondent’s system is not designed with adequate pressure control and relief to ensure pressure can be kept within MOP.

A. Safety Standards

The pipeline safety regulations at 49 C.F.R. § 195.406 establish the maximum safe operating pressure for pipelines. Pursuant to § 195.406(a), an operator is prohibited from operating any pipeline at a pressure that exceeds the established MOP of the line, with limited exceptions.

The exceptions to the maximum operating limit in § 195.406(a) are for “surge pressures and other variations from normal operations.” A “surge pressure” is defined in § 195.2 as the pressure produced by a change in velocity of the moving stream that results from shutting down a pump station or pumping unit, closure of a valve, or any other blockage of the moving stream. Due to the low compressibility of hazardous liquid and near instantaneous adjustment in pressure for the transient condition, surges should be brief in duration depending on the length of the affected segment. For example, PHMSA has found that a pressure excursion lasting less than one minute that occurred during a shutdown was a surge pressure under § 195.406.40

“[O]ther variations from normal operations” is not separately defined in the regulation. The regulatory history of the rule and subsequent publications do not suggest any distinguishing characteristics between surge pressures and other variations from normal operations, as those terms are used in § 195.406.41 Whereas a surge may be caused by a shutdown or blockage of the

moving stream, a variation from normal operation could have a different cause. Regardless of the cause of the variation, the excursion is not permitted to exceed MOP for an indefinite amount of time. In order to comply with the operating pressure restriction in § 195.406(a), an operator’s pipeline system must be capable of achieving timely pressure reduction in the event of a surge or other type of variation from normal operation.

B. Analysis and Findings

In the present case, Respondent’s system experienced multiple pressure excursions above MOP for periods longer than ten minutes. Respondent took action to reduce pressure at the first sign of exceeding MOP, but Respondent was not able to bring pressure back to within MOP in a timely manner. Pressure excursions lasting more than ten minutes on multiple occasions over the course of several years, even if unintentional, are not merely “variations from normal operations” permitted under the regulation. Such long-lasting and regular excursions suggest that relief equipment, operating procedures, or both were not adequate to ensure operations in accordance with § 195.406.

Accordingly, PHMSA finds Respondent violated § 195.406(a) by operating its pipeline above MOP for durations exceeding 10 minutes on 17 occasions. PHMSA also finds Respondent violated § 195.406(b) by failing to prevent pressure from exceeding 110% of MOP.

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 . . . .

The Notice alleged that Respondent violated § 195.402(a) by failing to follow its written procedures that required Respondent to identify activity along the right-of-way that could pose a hazard or compromise the safety, integrity or operation of the pipeline and right-of-way. The Notice alleged there were encroachments in Respondent’s right-of-way, such as large quantities of junk, abandoned cars, and oil storage tanks.

In its written submissions and at the hearing, Respondent did not contest the alleged violation, but did request modification of the proposed compliance order, which is discussed below.

Having considered the evidence, PHMSA finds Respondent violated § 195.402(a) by failing to follow its written procedures for inspecting pipeline rights-of-way.

These findings of violation 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. The Notice proposed a total civil penalty of $149,800 for the violations in Items 2, 4, and 5. The Notice did not propose a civil penalty for Item 1.

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 without any reduction because of subsequent damages, and such other matters as justice may require.

Item 2: The Notice proposed a civil penalty of $61,500 for Respondent’s violation of 49 C.F.R. § 195.410. Respondent failed to place line markers in sufficient number over each buried pipeline so that its location is accurately known.

With regard to the nature, circumstances, and gravity of the violation, PHMSA finds that pipeline integrity or safe operation was potentially compromised at road or railroad crossings and other areas where third party damage is a risk of releasing hazardous liquid affecting the public, property, and environment.

Respondent was cognizant of the regulatory requirement and took some steps to address the issue by having line markings in some locations, but Respondent did not achieve compliance on every pipeline segment.

PHMSA finds the proposed penalty is supported by the record and there is not sufficient reason to adjust the penalty for culpability, good faith, effect on ability to continue in business, or history of prior offenses. Accordingly, having reviewed the record and considered the assessment criteria, PHMSA assesses Respondent a civil penalty of $61,500 for the violation of § 195.410.

Item 4: The Notice proposed a civil penalty of $55,400 for Respondent’s violation of § 195.406. Respondent violated § 195.406(a) by failing to reduce pressure excursions to within MOP for durations exceeding 10 minutes. In addition, Respondent violated § 195.406(b) by failing to prevent pressure from exceeding 110% of MOP.

With regard to the nature, circumstances, and gravity of the violations, PHMSA finds pipeline integrity or safe operation was potentially compromised resulting in an elevated risk of an overpressure condition and pipeline release affecting the safety of the public, property, and environment.

42 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 was cognizant of the regulatory requirement and took some steps to address the problem by discovering issues with its overpressure monitoring system, but Respondent did not achieve compliance by preventing reoccurrence.

PHMSA finds the proposed penalty is supported by the record and there is not sufficient reason to adjust the penalty for culpability, good faith, effect on ability to continue in business, or history of prior offenses. Accordingly, having reviewed the record and considered the assessment criteria, PHMSA assesses Respondent a civil penalty of $55,400 for the violation of § 195.406.

**Item 5**: The Notice proposed a civil penalty of $32,900 for Respondent’s violation of § 195.402(a). Magellan failed to follow its written procedures for identifying activity along the pipeline right-of-way that could pose a hazard or compromise the safety, integrity or operation of the pipeline or right-of-way. Respondent did not contest the proposed penalty for this violation. Accordingly, having reviewed the record and considered the assessment criteria, PHMSA assesses Respondent a civil penalty of $32,900 for violation of § 195.402(a).

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 **$149,800**.

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, P.O. Box 269039, Oklahoma City, Oklahoma 73125-4915. The Financial Operations Division telephone number is (405) 954-8845.

Failure to pay the $149,800 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 each of the violations cited above. 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.
With regard to the violation of § 195.575 (Item 1), Respondent argued that it would be inappropriate to include the proposed requirement to clear shorted casings because that is not the only method to comply with § 195.575.\textsuperscript{43}

PHMSA agrees that the terminology of the compliance order should be changed to recognize the regulation permits operators to address shorted casings either by electrical isolation or by electrically interconnecting and cathodically protecting the pipeline and casing a single unit.

With regard to the violation of § 195.402(a) (Item 5), Respondent argued the proposed compliance order should be revised to reflect Magellan’s written maintenance program, which requires at a minimum, aerial surveillance once a year and an integrity assessment to identify areas that may require maintenance.\textsuperscript{44} Respondent also argued that it should be allowed to use other methods of patrolling if a right-of-way cannot be inspected aerially due to obstructions.\textsuperscript{45}

PHMSA concludes that Respondent must achieve compliance with § 195.402(a) by having and following written procedures that implement the right-of-way inspection and maintenance requirements.\textsuperscript{46} Respondent must ensure proper patrolling practices are followed and must remedy existing encroachments and vegetation that could adversely affect pipeline safety, or that could impair observation of the right-of-way during inspection. PHMSA does not find the compliance order warrants modification to the degree suggested by Respondent. Notwithstanding, PHMSA agrees the compliance order should recognize that Respondent may use methods of inspection like walking or driving if a right-of-way is not capable of being aerially inspected.

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 (Item 1), Respondent must perform tests to determine if casings are metallically or electrolytically shorted. If as a result of those tests, a casing is determined to be metallically or electrolytically shorted, Respondent must evaluate inline inspection (ILI) data of that location for indications of corrosion or metal loss and make any required repairs to the carrier pipe. If ILI data from the past five years is not available for that location, Respondent must perform studies using ILI or an alternative technology to determine if there is corrosion or metal loss requiring repairs. Respondent must also address the shorted casings either by electrically isolating the buried or submerged pipeline from other metallic structures, or by electrically interconnecting and cathodically protecting the pipeline and structure as a single unit. Respondent must submit a plan to perform the actions

\textsuperscript{43} Brief at 11.
\textsuperscript{44} Supp. Response at 2.
\textsuperscript{45} Brief at 3.
\textsuperscript{46} See §§ 195.401 and 195.412.
required in this paragraph within 30 day of receipt along with its written procedures for addressing both metallically and electrolytically shorted casings.

2. With respect to the violation of § 195.410 (Item 2), Respondent must install additional line markers at the identified locations in the Barnsdall, Tulsa, Oklahoma City, Odessa to El Paso, and Cimarron inspection units so that the location of the pipeline is accurately known.

3. With respect to the violation of § 195.406 (Item 4), Respondent must review the design of its overpressure protection systems and make changes necessary to prevent instances of exceeding MOP for longer than a surge event. Respondent must also perform a review of the establish MOP for each pipeline segment, check the set points of each overpressure device, ensure each overpressure device is correctly tagged, and check each inspection form to ensure the tag numbers, maximum pressures, and set points are all correct.

4. With respect to the violation of § 195.402(a) (Item 5), Respondent must make appropriate changes to its written operations and maintenance procedures for inspecting rights-of-way to ensure such procedures are followed. Respondent must also remedy any encroachments and vegetation that could adversely affect pipeline safety or that could impair observation of the right-of-way during inspection. The procedures must include provisions for each method of inspection used, including walking or driving if Respondent uses those methods to inspect rights-of-way that are not capable of being aerially inspected.

5. Submit documentation demonstrating compliance with this Compliance Order within 180 days of receipt of this Order. Documentation must be submitted to the Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration, 8701 South Gessner, Suite 1110, Houston, TX 77074.

6. It is requested 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.

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 3, 6, 7, 8, 9, 10 and 11, the Notice alleged probable violations of Part 195, but considered them to be warning items.

A warning item issued pursuant to 49 C.F.R. § 190.205 constitutes an allegation that OPS has identified a potential issue, which if found in a future inspection, may subject the operator to an enforcement action. Unlike other alleged violations, PHMSA does not make a finding as to whether an allegation contained in a warning was proven by evidence in the record. An operator may respond to a warning. In this case, Respondent responded to Items 3, 8, 9 and 10.

The warnings in the Notice were for:

49 C.F.R. § 195.567 (Item 3) – Respondent’s alleged failure to maintain test lead wires in a condition to enable obtaining electrical measurements and to determine whether cathodic protection complies with applicable criteria. In its response, Respondent did not dispute that test leads were damaged or destroyed, but contended that no violation was proven because Respondent had a reasonable amount of time to correct the conditions under § 195.401.47

49 C.F.R. § 195.402(a) (Item 6) – Respondent’s alleged failure to follow its written procedures for marking exposed pipe.

49 C.F.R. § 195.571 (Item 7) – Respondent’s alleged failure to ensure that cathodic protection on pipelines met applicable criteria.

49 C.F.R. § 195.573(d) (Item 8) – Respondent’s alleged failure to ensure that cathodic protection on the bottom of breakout tanks met applicable criteria. In its response, Respondent did not dispute that cathodic protection failed to meet applicable criteria, but contended that no violation was proven because evidence in the record did not relate to Respondent’s inspection intervals.48

49 C.F.R. § 195.583(c) (Item 9) – Respondent’s alleged failure to provide protection against atmospheric corrosion at certain locations. Respondent did not dispute that atmospheric corrosion was observed at 22 locations on its pipeline facility, but contended that no violation was proven because evidence did not relate to Respondent’s inspection intervals or show that the corrosion would affect safe operations.50

49 C.F.R. § 195.430 (Item 10) – Respondent’s alleged failure to maintain adequate firefighting equipment at each pump station and breakout tank area. Respondent did not

49 The Notice erroneously cited this regulation as § 195.573(c).
dispute that it only had fire extinguishers at most pump stations and breakout tank areas, and that it relied on public firefighting agencies and cooperatives. Respondent contended, however, there is no obligation under the regulation for operators to confirm whether local firefighting organizations have adequate firefighting equipment.51

49 C.F.R. § 195.432(b) (Item 11) – Respondent’s alleged failure to have an inspection program and methodology that meets the requirements for inspecting the physical integrity of in-service breakout tanks according to API Standard 653 (incorporated by reference, see § 195.3).

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. § 190.215. The filing of a petition automatically stays the payment of any civil penalty assessed. All other terms of the order, including the 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