May 1, 2018

Mr. Steven J. Kean
President and Chief Executive Officer
Kinder Morgan, Inc.
1001 Louisiana Street, Suite 1000
Houston, Texas 77002

Re: CPF No. 5-2017-5011

Dear Mr. Kean:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation and specifies actions that need to be taken by Kinder Morgan’s subsidiary, CALNEV Pipe Line, LLC, to comply with the pipeline safety regulations. When the terms of the compliance order have been completed, as determined by the Director, Western Region, this enforcement action will be closed. Service of the Final Order is effective as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Director, Western Region, Office of Pipeline Safety, PHMSA
Mr. Wayne Simmons, Chief Operating Officer, Products Pipelines, Kinder Morgan

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
On several occasions from September 7, 2016, through November 18, 2016, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of CALNEV Pipe Line, LLC’s (CALNEV or Respondent) hazardous liquid pipeline running from Colton, California, to Las Vegas, Nevada. CALNEV, a subsidiary of Kinder Morgan, Inc., (Kinder Morgan) operates this transmission pipeline, which is approximately 550 miles long and transports jet fuel and refined products through parallel 14-inch and 8-inch diameter pipelines that originate in Colton, California, and extend to terminals in Barstow, California, and Las Vegas, Nevada.¹ The pipeline system also serves Nellis Air Force Base in Las Vegas, Nevada, McCarran International Airport in Las Vegas, Nevada, and Edwards Air Force Base in the Mojave Desert in southeastern California.²

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated July 6, 2017, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that CALNEV had committed two violations of 49 C.F.R. Part 195 and ordering Respondent to take certain measures to correct the alleged violations.

CALNEV responded to the Notice by letter dated August 10, 2017 (Response). The company contested the allegations, offered additional information in response to the Notice, and provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.


FINDINGS OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

**Item 1:** 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. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

The Notice alleged that Respondent violated 49 C.F.R. § 195.402(a) by failing to follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. Specifically, the Notice alleged that CALNEV did not follow its written procedure, *Atmospheric Breakout Tank Inspections (L-O&M 2101)* when it failed to adequately document the condition of three breakout tanks (i.e., Tanks #120, #321, and #521) on monthly inspection reports. Kinder Morgan’s *L-O&M 2101, Section 3.1.1*, states, in relevant part:

This in-service inspection shall include a visual inspection of the tank’s exterior surfaces. Evidence of leaks; shell distortions; signs of settlement; corrosion; and condition of the foundation, paint and coatings, insulation systems, and appurtenances shall be documented on [L-OM2100-02, Monthly Breakout Tank Inspection Report](#) and reported to the local supervisor.3

The Notice alleged that CALNEV did not properly document the atmospheric corrosion conditions on the Monthly Breakout Tank Inspection reports for the following three tanks:

**Tank #120**

The Notice alleged that the annual inspections conducted by CALNEV’s contractor had indicated paint failures and rust observed on Tank #120’s roof, shell and appurtenances for the 2015 and 2016 annual inspections. However, the 2015 and 2016 monthly inspections conducted by CALNEV employees did not record the same information and only indicated the roof, shell and its appurtenances were “Okay.” Additionally, the Notice alleged that during its own 2016 inspection, PHMSA observed atmospheric corrosion and coating degradations on the shell and its appurtenances, which were not listed by CALNEV on its Monthly Breakout Tank Inspections Reports.

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3 Violation Report, Exhibit H (emphasis in original).
In its Response, CALNEV acknowledged the failure of its employees to properly document observations about the paint condition on Tank #120. However, CALNEV argued that Tank #120 did not have atmospheric corrosion or coating degradations on the shell and its appurtenances, as alleged in the Notice. CALNEV pointed to PHMSA’s website, which defines the term “corrosion” as the deterioration of metal, resulting from a reaction with its environment. CALNEV asserted that the PHMSA inspector only observed a “light, non-injurious surface oxide involving no metal loss” because the atmospheric conditions in Colton, California, were not “conducive to creating a corrosive environment.”

Having reviewed the record, I find that while CALNEV is correct that corrosion can be defined as “the deterioration of metal, resulting from a reaction with its environment,” it is important to note that common rust is an example of metal corrosion. In fact, this is explained in the definition of corrosion that Respondent cited. The photographs taken during the PHMSA inspection clearly show rust on Tank #120, disproving Respondent’s claim that conditions are not conducive to corrosion. Not only did the PHMSA inspector observe and photograph corrosion on Tank #120, this condition was corroborated by the observations of the contractor during the annual inspections, as noted in the annual inspection reports. This condition was not properly documented in accordance with Kinder Morgan’s Atmospheric Breakout Tank Inspections (L-O&M 2101) procedure and therefore, I find that CALNEV failed to follow its own written procedure.

Tank #321 and Tank #521

The Notice alleged that the 2015 and 2016 annual inspections by CALNEV’s contractor and monthly inspections by CALNEV personnel indicated paint failures/discolorations on the shells and appurtenances of Tanks #321 and #521, but no atmospheric corrosion conditions. During its own 2016 inspection, PHMSA observed, in addition to the coating deterioration, atmospheric corrosion on the shells and appurtenances, which was not listed on the monthly inspection reports.

In its Response, CALNEV asserted that its personnel followed L-O&M 2101 and properly documented their observations. CALNEV again asserted that the PHMSA inspector was mistaken and only observed a “light, non-injurious surface oxide involving no metal loss.”

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4 Response, at 1.

5 Id., at 1, 2.

6 Id., at 2.

7 Id.


9 Violation Report, Exhibit K.

10 Response at 1, 2.
As discussed above, rust is an example of metal corrosion. During its 2016 inspection, PHMSA observed and photographed rust on Tank #321. This condition was not properly documented by CALNEV in accordance with Kinder Morgan’s L-O&M 2101 and, therefore, I find that CALNEV failed to follow its own written procedure.

In summary, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.402(a) by failing to follow for each pipeline system its own manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies (specifically, Kinder Morgan’s L-O&M 2101) when it did not properly document the corrosion conditions for Tank #120, Tank #321, and Tank #521.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 195.402(a), as quoted above, by failing to follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. Specifically, the Notice alleged that CALNEV failed to follow its own written procedure, Inspecting for Atmospheric Corrosion (L-O&M 918), when it did not adequately document atmospheric corrosion conditions at four locations. Kinder Morgan’s L-O&M 918, Section 3.4, states, in relevant part:

Visually inspect all onshore, aboveground piping and structural components for evidence of atmospheric corrosion at least once every 3 calendar years, but with intervals not to exceed 39 months (L-O&M Procedure 1700, Inspection & Maintenance, L-I&M I-1141.00). . .

During inspection, give particular attention to the following components:
- Flange gaps and bolts
- Soil-to-Air Interface
- Splash zones
- Air/building interface
- Crevices
- Pipe supports and wear pads
- Pipe under insulation
- Spans/bridges
- Deck penetrations

This procedure includes an attachment for evaluating and grading the conditions of above-ground piping and associated structural components for signs of atmospheric corrosion. This attachment contains sample pictures of atmospheric conditions of above-ground pipe and instructions on how to grade or evaluate the conditions as being “Good,” “Fair,” or “Poor.”

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11 Violation Report, Exhibit N and Exhibit Q.

12 Id., Exhibit R (emphasis in original).

13 Id., Exhibit S.
The Notice alleged that CALNEV’s 2014, 2015, and 2016 atmospheric-corrosion inspection records, as well as the 2014 and 2016 Bridge/Span inspection reports, indicated all the atmospheric-corrosion conditions on the above-ground pipes were evaluated as “Good.” At the time of the inspection, however, PHMSA observed and photographed several above-ground pipes and components with atmospheric corrosion that should have been evaluated as “Fair” or “Poor,” according to *L-O&M 918*. The incorrect evaluations involved the following four locations:

**Colton North Terminal**

The Notice alleged during its 2016 inspection, PHMSA observed signs of atmospheric corrosion on the soil-to-air interface of the pipe at the Colton North Terminal, coating disbondment on the pipe, corrosion and pitting on the pipe under the above-ground flange that had inadvertently been buried, an above-ground valve body that was also inadvertently buried, and signs of corrosion pitting and coating deterioration on pump equipment.

**Valley Wells Pump Station**

The Notice alleged that during its 2016 inspection, PHMSA observed that pump equipment at the Valley Wells Pump Station had been inadvertently buried and showed signs of atmospheric corrosion.

With respect to these two locations, CALNEV agreed that there may have been “some coating deterioration,” but disagreed with the allegations regarding atmospheric corrosion. In addition, CALNEV stated that its procedure *L-O&M 918* applied to the inspection of above-ground components for corrosion, not for inspecting coating. CALNEV further argued that components below ground were subject to a different Kinder Morgan inspection procedure (*L-O&M 903*). Finally, CALNEV argued there were no conditions at the above two locations involving metal loss on the components and no condition that could affect the safe operation of the components before the next inspection.

I am unpersuaded by CALNEV’s arguments. Having reviewed the record, I note, as mentioned above, that Kinder Morgan’s procedure directs employees to an attachment - *L-O&M 918 Atmospheric Corrosion Inspection Guidelines* - for guidelines on “grading coating condition.” These guidelines specifically utilize levels of coating deterioration for grading atmospheric corrosion. Additionally, while CALNEV asserted that observed conditions did not involve metal loss or any effect on safe operations, *L-O&M 918* and the attachment do not instruct conditions to be graded as “Good” in the absence of metal loss or conditions affecting safe operations. Rather the procedures require the evaluation and grading of levels of corrosion based on certain criteria and illustrations related to the condition of the coating and topcoat, location of corrosion, and the presence of any pitting or scale.

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14 Response at 2.

15 Id.
Further, the photographs clearly show the coating was not “intact” or “limited to ‘chalking’” and that the atmospheric corrosion was beyond mere “minor surface corrosion,” and, therefore, should not have been graded “Good,” according to Kinder Morgan’s own *Atmospheric Corrosion Inspection Guidelines*. The photographs also show that the components were installed as above-ground components, but had become surrounded by mostly gravel. If the components were meant to be buried, they would have had to meet different coating requirements that would protect against external corrosion caused by the elements of the soil environment, whereas, in this case, after digging less than 1/2 inch of gravel to expose the components, the riser pipe connected to the flange showed severe external corrosion and no coating.

Therefore, I find that CALNEV failed to follow its procedures when it did not properly grade corrosion conditions at the above two locations.

**Las Vegas Terminal**

The Notice alleged that during its 2016 inspection, PHMSA observed a metallic contact between an above-ground pipe and a metallic support. The inspector also observed that the surface area within the vicinity of the metallic contact showed galvanic corrosion activity. Because of this existing condition, the Notice alleged, the PHMSA inspector was unable to conduct an accurate atmospheric-corrosion inspection on the contact surface.

In its Response, CALNEV stated that it had submitted to PHMSA the two most recent Facility Risk Evaluations, which indicated “no substantial risk related to atmospheric corrosion.” CALNEV also stated it had provided wall-thickness evaluations for the pipe in question, demonstrating “no wall loss.” CALNEV also noted that the pipe was resting on a 3/4-inch piece of hot roll steel that was “designed to wear due to pipe movement, and thus eliminate degradation of the pipeline wall thickness.”

PHMSA has since reviewed the information provided by CALNEV following the 2016 PHMSA inspection, accepts this documentation, and therefore withdraws this alleged violation for Item 2.

**Baldy Mesa Aqueduct Pipe Span**

The Notice alleged during its 2016 inspection, PHMSA observed signs of atmospheric corrosion on a span of 14-inch pipe at the California Aqueduct overhead crossing near Baldy Mesa Road.

In its Response, CALNEV asserted that it had recently discovered, after reviewing additional records, that the PHMSA inspector was observing a casing and not a carrier pipe. At the time of the inspection, a Kinder Morgan employee had incorrectly advised the PHMSA inspector that it was a carrier pipe.

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16 *Violation Report, Exhibits S, V and W.*

17 *Response at 3.*

18 *Id.*
Having reviewed the evidence in the record, I find that by failing to correctly identify the inspected component as a casing on its inspection forms, CALNEV did not accurately complete the 2014-2016 Annual Bridge/Span Inspection Report form. Therefore, CALNEV failed to follow its procedures when it did not properly document the inspection at the above location.

In summary, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.402(a) by failing to follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies (specifically, Kinder Morgan’s L-O&M 918) when it did not properly document conditions at three locations. The allegation related to the Las Vegas Terminal, however, is withdrawn.

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

**COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Items 1 and 2 in the Notice for violations of 49 C.F.R. § 195.402(a). 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.

With regard to the violations of § 195.402(a) (Items 1 and 2), Respondent argued that the compliance terms should be withdrawn. While CALNEV agreed that it had failed to follow a portion of its procedures in “one very narrow circumstance,” but that one instance had since been corrected.\(^\text{19}\) CALNEV argued that the compliance terms were unnecessary,\(^\text{20}\) and that it had been fully compliant with the regulations and its procedures.\(^\text{21}\) Since I have already determined that Respondent violated § 195.402(a) as discussed above, the proposed compliance order is not withdrawn in its entirety, but only that portion pertaining to the Las Vegas Terminal. The compliance order is also modified based on CALNEV’s response to the allegation relating to the Baldy Mesa Aqueduct Pipe Span for Item 2.

As for Item 1 and for all the facilities covered under Item 2 (except for the Las Vegas Terminal), 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 § 195.402(a) (**Items 1 and 2**), Respondent must requalify all its personnel who conducted atmospheric corrosion inspections from 2014 to 2016, and provide adequate training in evaluating atmospheric corrosion conditions of pipeline systems and in-service breakout tanks;

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\(^{19}\) *Id.*, at 1.

\(^{20}\) *Id.*, at 4.

\(^{21}\) *Id.*, at 1 and 4.
2. With respect to the violation of § 195.402(a) (Item 2), Respondent must amend the Bridge/Span Inspection Report Form to include an indication on the form that the pipe spans inspected are pipe casing;

3. With respect to the violation of § 195.402(a) (Item 2), Respondent must conduct a full survey to locate all pipeline components that have been inadvertently buried and mitigate any issues found; and

4. Submit to the Director, Western Region, OPS, within 180 days following receipt of this Final Order, written documentation of steps taken to satisfy Compliance Order Items 1 through 3 above.

The Director 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.

In addition, pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is requested (not mandated) to take the following action:

CALNEV should maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Director, Western Region, Pipeline and Hazardous Materials Safety Administration. 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.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed $200,000, as adjusted for inflation (49 C.F.R. § 190.223), 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.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this 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 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.

May 1, 2018

Alan K. Mayberry
Associate Administrator for Pipeline Safety

Date Issued