



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

1200 New Jersey Avenue, SE
Washington, D.C. 20590

SEP 20 2013

Ms. Kimberly S. Watson
President
Southern Natural Gas Company, L.L.C.
1001 Louisiana St., Suite 1000
Houston, TX 77002

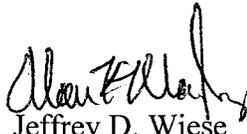
Re: CPF No. 4-2011-1011M

Dear Ms. Watson:

Enclosed please find the Order Directing Amendment issued in the above-referenced case. It makes findings of inadequate procedure, finds that certain procedures have been appropriately amended to address the inadequacies, and requires that Southern Natural Gas Company, L.L.C. complete additional amendments to address the remaining inadequacies. When the amendment of procedures has been completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Order Directing Amendment by certified mail is effective as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

for: 
Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. R. M. Seeley, Director, Southwest Region, OPS
Jessica Toll, Esq., Assistant General Counsel, Kinder Morgan, Inc.,
370 Van Gordon St., Lakewood, CO 80228-8304

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

Southern Natural Gas Company, L.L.C.,

Respondent.

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) **CPF No. 4-2011-1011M**
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ORDER DIRECTING AMENDMENT

During 2010, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to 49 U.S.C. § 60117, conducted an inspection of the written procedures and records of Southern Natural Gas Company, L.L.C. (SNG or Respondent). SNG is a subsidiary of Kinder Morgan Inc. (Kinder Morgan) and operates approximately 7,600 miles of natural gas transmission pipeline located primarily in Georgia, Alabama, Mississippi and Louisiana.¹

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued a Notice of Amendment (Notice) to Respondent on October 20, 2011. In accordance with 49 C.F.R. § 190.237, the Notice alleged that Respondent's written procedures were inadequate to assure safe operations and proposed that Respondent revise the procedures.

SNG responded to the Notice by letter dated November 28, 2011. Respondent requested a hearing and requested additional time to respond to the Notice due to its pending acquisition by Kinder Morgan. After receiving several extensions of time, Respondent submitted a written response to the Notice on October 15, 2012 (Response) and explained that as a result of the acquisition, the SNG integrity management program (IMP) and operating and maintenance (O&M) procedures were being reviewed and modified to integrate common requirements for all Kinder Morgan companies. Respondent also submitted revised procedures, some of which were in draft form.

In accordance with 49 C.F.R. § 190.211, a hearing was held on October 25, 2012, in Houston, Texas, before the Presiding Official from the Office of Chief Counsel, PHMSA. After the hearing, Respondent submitted additional information including revised procedures on

¹ SNG has reported its pipeline system information for calendar year 2012 pursuant to 49 C.F.R. § 191.17. SNG and its parent, El Paso Corporation, were acquired by Kinder Morgan Inc. during the course of this proceeding.

November 9 and 29, 2012. On January 17, 2013, Respondent submitted further revised procedures to the Director, including some draft procedures.²

Having reviewed the revised procedures, I find Respondent has addressed the inadequacies in Items 2–5, 7, 8 and 11 of the Notice. Accordingly, the amendments proposed in the Notice for those Items are not included in this Order. For the reasons set forth below, I find Respondent's procedures remain inadequate with regard to Items 1, 6, 9 and 10 of the Notice. Pursuant to 49 U.S.C. § 60108(a), Respondent is ordered to revise its procedures to address the inadequacies.

The Notice alleged that Respondent's procedures were inadequate as follows:

Item 1: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.911 and 192.915(b), which state:

§ 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework (*see* § 192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program

§ 192.915 What knowledge and training must personnel have to carry out an integrity management program?

(a)

(b) *Persons who carry out assessments and evaluate assessment results.* The integrity management program must provide criteria for the qualification of any person—

(1) Who conducts an integrity assessment allowed under this subpart;
or

(2) Who reviews and analyzes the results from an integrity assessment and evaluation; or

(3) Who makes decisions on actions to be taken based on these assessments.

The Notice alleged that SNG's procedures were inadequate because they did not provide criteria for the qualification of persons who review and analyze the results from an integrity assessment and evaluation. Specifically, the Notice alleged the company's procedures did not require personnel to meet acceptable qualification standards for reviewing and evaluating results from external corrosion direct assessment (ECDA), pressure testing, and stress corrosion cracking direct assessment (SCCDA).

In response to this Item, Respondent submitted the following revised procedures: (1) Kinder Morgan procedure O&M 920, *External Corrosion Direct Assessment*, dated November 1, 2012;

² The January 2013 information was not submitted to the Presiding Official, but the Director forwarded the information for insertion into the official case record.

- (2) Kinder Morgan procedure O&M 919, *SCC Direct Assessment*, dated October 10, 2012;
- (3) Kinder Morgan procedure O&M 199, *Operator Qualification*, dated September 1, 2010;
- (4) Section 9 of Kinder Morgan IMP, *Continual Evaluation and Assessment*, dated December 1, 2010; and
- (5) Section 15 of Kinder Morgan IMP, *Quality Assurance*, labeled "Draft 11/9/2012."

Having reviewed the procedures, I find they address the issue raised in the Notice, with the exception of Section 15 of Kinder Morgan IMP. Although the procedure is otherwise adequate, submission of a draft procedure does not confirm that Respondent has adopted the procedure.

Accordingly, I find that Respondent's procedure remains inadequate. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to address this inadequacy.

Item 2: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.911 and 192.915(b)(1), quoted above, because the procedures did not provide criteria for the qualification of contractor personnel who conduct integrity assessments. Specifically, the Notice alleged that SNG reviews contractors' resumes for their experience, but the procedures did not specify the qualification requirements for contractor personnel who perform ECDA and SCCDA.

In response to this Item, Respondent submitted the following procedures: (1) Kinder Morgan procedure O&M 920, *External Corrosion Direct Assessment*, dated November 1, 2012; (2) Kinder Morgan procedure O&M 919, *SCC Direct Assessment*, dated October 10, 2012; and (3) Kinder Morgan procedure O&M 199, *Operator Qualification*, dated September 1, 2010.

Having reviewed the procedures, I find they address the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 3: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.911 and 192.915(b)(2), quoted above, because they did not provide criteria for the qualification of contractor personnel who review and analyze the results from an integrity assessment and evaluation. Specifically, the Notice alleged that SNG reviews contractors' resumes for their experience, but SNG's procedures did not specify the qualification requirements for contractor personnel who review the results of ECDA methods and perform information analysis.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 920, *External Corrosion Direct Assessment*, dated November 1, 2012.

Having reviewed the procedure, I find it addresses the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 4: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.911(b) and 192.921(a)(1), which state:

§ 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program . . . and subsequent program must, at minimum, contain the following elements . . .

(b) A baseline assessment plan meeting the requirements of §§ 192.919 and 192.921.

§ 192.921 How is the baseline assessment to be conducted?

(a) *Assessment methods.* An operator must assess the integrity of the line pipe in each covered segment by applying one or more of the following methods depending on the threats to which the covered segment is susceptible. An operator must select the method or methods best suited to address the threats identified to the covered segment (*see* § 192.917).

(1) Internal inspection tool or tools capable of detecting corrosion, and any other threats to which the covered segment is susceptible. An operator must follow ASME/ANSI B31.8S (incorporated by reference, *see* § 192.7), section 6.2 in selecting the appropriate internal inspection tools for the covered segment.

The Notice alleged that Respondent's procedures were inadequate because the baseline assessment plan did not contain sufficient detail for internal integrity assessments. Specifically, the Notice alleged that Respondent's procedures did not define the actions and processes to be taken if a tool vendor cannot complete a review of the internal inspection results within 180 days of the assessment.³

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 916, *In-Line Inspections*, dated June 1, 2010.

Having reviewed the procedure, I find it addresses the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 5: The Notice alleged that Respondent's procedures were also inadequate with regard to §§ 192.911(b) and 192.921(a)(1), quoted above, because the baseline assessment plan did not contain sufficient detail for validating internal integrity assessment results. Specifically, the Notice alleged Respondent's procedures did not require the person evaluating the assessment results to correlate the reported data with actual in-field measurements to determine whether any significant discrepancies warrant further analysis or other type of action.

³ Under § 192.933(b), an operator must promptly, but no later than 180 days after conducting an integrity assessment, obtain sufficient information about a condition to determine whether it presents a potential threat to the integrity of the pipeline.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 916, *In-Line Inspections*, dated June 1, 2010, and the *Kinder Morgan Action Plan / Closure Report Template* that is referenced in O&M 916.

Having reviewed the procedures, I find they address the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 6: The Notice alleged that Respondent's procedures were inadequate with regard to § 192.911, quoted above, and § 192.917(b), which states:

§ 192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?

(a)

(b) *Data gathering and integration.* To identify and evaluate the potential threats to a covered pipeline segment, an operator must gather and integrate existing data and information on the entire pipeline that could be relevant to the covered segment. In performing this data gathering and integration, an operator must follow the requirements in ASME/ANSI B31.8S, section 4. At a minimum, an operator must gather and evaluate the set of data specified in Appendix A to ASME/ANSI B31.8S, and consider both on the covered segment and similar non-covered segments, past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records and all other conditions specific to each pipeline.

The Notice alleged that Respondent's procedures were inadequate because they did not provide sufficient detail concerning the integration of existing information from the operator's corrosion control program. Specifically, the Notice alleged that procedure POP 306, Section 6, *Future Mitigation*, did not include details of how corrosion control information is to be integrated with the internal integrity assessment results.

In its Response and at the hearing, Respondent stated that the POP 306 procedure and Kinder Morgan O&M Procedure 916 were never intended to cover data integration or evaluation of the corrosion control program. Respondent explained that data integration for the purpose of identifying and evaluating potential threats had been addressed in the SNG IMP, Appendix A, but the procedure would soon be replaced. At the hearing, Respondent agreed to submit a new Kinder Morgan procedure that would be used to address this issue.

In its post-hearing submissions, however, I do not find any further discussion of Item 6 or any reference to procedures that were submitted for the purpose of satisfying this issue.

Accordingly, I find that Respondent's procedure remains inadequate. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to revise its procedures to address this inadequacy.

Item 7: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.911(e) and 192.933(a)(1) and (d), which state:

§ 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program . . . and subsequent program must, at minimum, contain the following elements . . .

(e) Provisions meeting the requirements of § 192.933 for remediating conditions found during an integrity assessment.

§ 192.933 What actions must be taken to address integrity issues?

(a) *General requirements.* An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment

(1) *Temporary pressure reduction.* If an operator is unable to respond within the time limits for certain conditions specified in this section, the operator must temporarily reduce the operating pressure of the pipeline or take other action that ensures the safety of the covered segment

(d) *Special requirements for scheduling remediation—(1) Immediate repair conditions.* An operator's evaluation and remediation schedule must follow ASME/ANSI B31.8S, section 7 in providing for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure in accordance with paragraph (a) of this section or shut down the pipeline until the operator completes the repair of these conditions

The Notice alleged that Respondent's procedures were inadequate because the procedures did not require operating pressure to be reduced or the pipeline to be shut down as soon as practicable after an immediate repair condition is identified. Specifically, the Notice alleged that Respondent's procedures allowed five days from discovery of an immediate repair condition to examine the condition before taking any pressure reduction.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 916, *In-Line Inspections*, dated June 1, 2010.

Having reviewed the procedure, I find it addresses the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but that Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 8: The Notice alleged that Respondent's procedures were inadequate with regard to §§ 192.605(b)(2) and 192.455(a)(1), which state:

§ 192.605 Procedural manual for operations, maintenance, and emergencies.

(a)

(b) *Maintenance and normal operations.* The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations . . .

(2) Controlling corrosion in accordance with the operations and maintenance requirements of subpart I of this part [§§ 192.451–192.491].

§ 192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.

(a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

(1) It must have an external protective coating meeting the requirements of § 192.461.

The Notice alleged that Respondent's procedures were inadequate because they did not provide sufficient detail concerning the manner in which personnel must document the condition of coating when pipe is exposed. Specifically, the Notice alleged the procedures required that coating condition be recorded using terms such as "good," "fair," and "excellent." The procedures, however, did not provide criteria for the selection of those terms. Personnel in the field would therefore make their own judgment as to how the terms should be applied.

In response to this Item, Respondent submitted Kinder Morgan form OM200-02IMP and applicable procedures for completing the forms, dated September 2012.

Having reviewed the procedures, I find they address the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Item 9: The Notice alleged that Respondent's procedures were inadequate with regard to § 192.605(b)(2), quoted above, and § 192.477, which states:

§ 192.477 Internal corrosion control: Monitoring.

If corrosive gas is being transported, coupons or other suitable means must be used to determine the effectiveness of the steps taken to minimize internal corrosion. Each coupon or other means of monitoring internal corrosion must be checked two times each calendar year, but with intervals not exceeding 7 ½ months.

The Notice alleged that Respondent's procedures were inadequate because they did not provide sufficient detail for determining the effectiveness of the steps taken to minimize internal corrosion. Specifically, the Notice alleged the procedures did not identify criteria used by the

monitoring program to determine if current mitigative measures were adequate or if additional mitigative measures were required.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 906, *Internal Corrosion Control*, dated December 20, 2012, which was labeled “DRAFT.” Although the procedure is otherwise adequate, the submission of a draft procedure does not confirm that Respondent has adopted the procedure.

Accordingly, I find Respondent’s procedure remains inadequate. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to address this inadequacy.

Item 10: The Notice alleged that Respondent’s procedures were also inadequate with regard to §§ 192.605(b)(2) and 192.477, quoted above, because the procedures did not provide details concerning the company’s use of the corrosion control database “TSIMS.” The database includes information about internal tool runs, coupons, and other data. The Notice further alleged the corrosion control procedures used for determining when supplemental action is needed did not define a specific corrosion rate that would trigger additional mitigative measures.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 906, *Internal Corrosion Control*, dated December 20, 2012, which was labeled “DRAFT.” While the revised procedure mentions the TSIMS system, it does not provide sufficient detail concerning specific corrosion rates and other factors that would trigger additional mitigative measures.

Accordingly, I find that Respondent’s procedures remain inadequate. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to revise its procedure to address the inadequacy.

Item 11: The Notice alleged that Respondent’s procedures were inadequate with regard to § 192.605(b)(2), quoted above, and § 192.485, which states:

§ 192.485 Remedial measures: Transmission lines.

(a) *General corrosion.* Each segment of transmission line with general corrosion and with a remaining wall thickness less than that required for the MAOP of the pipeline must be replaced or the operating pressure reduced commensurate with the strength of the pipe based on actual remaining wall thickness

(b) *Localized corrosion pitting.* Each segment of transmission line pipe with localized corrosion pitting to a degree where leakage might result must be replaced or repaired, or the operating pressure must be reduced commensurate with the strength of the pipe, based on the actual remaining wall thickness in the pits.

(c) Under paragraphs (a) and (b) of this section, the strength of pipe based on actual remaining wall thickness may be determined by the procedure in ASME/ANSI B31G or the procedure in AGA Pipeline Research Committee Project PR 3–805 (with RSTRENG disk)

The Notice alleged that SNG's procedures were inadequate because the procedures did not require reducing operating pressure or replacing pipe that has remaining wall thickness less than that required for the maximum allowable operating pressure (MAOP) of the pipeline. Specifically, the Notice alleged that Respondent's procedures required reducing pressure or replacing pipe only when metal loss results in a failure pressure (P_{fail}) less than or equal to 1.10 * MAOP, which is equivalent to 91% SMYS. This criterion, the Notice alleged, is less stringent than that specified in § 192.485(c), which requires action to be taken when metal loss results in remaining wall thickness less than that required for MAOP, or 72% SMYS.

In response to this Item, Respondent submitted Kinder Morgan procedure O&M 916, *In-Line Inspections*, dated June 1, 2010.

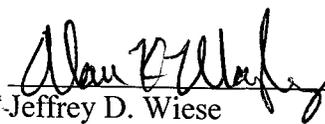
Having reviewed the newly adopted procedure, I find it addresses the issue raised in the Notice. Accordingly, I find that Respondent's procedures were inadequate, but Respondent has adopted new procedures to address the inadequacy. It is not necessary to order any further amendment with regard to this Item.

Within 45 days following receipt of this Order, Respondent must submit procedures that have been revised pursuant to **Items 1, 6, 9 and 10**, above. All documentation demonstrating compliance with this Order must be submitted to the Director, Southwest Region, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, 8701 S. Gessner, Suite 1110, Houston, TX 77074. In your correspondence on this matter, please refer to CPF No. 4-2011-1011M.

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 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 referral to the Attorney General for appropriate relief in a district court of the United States.

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


for Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

SEP 20 2013
Date Issued