Mr. Richard D. Kinder  
Chairman & Chief Executive Officer  
Kinder Morgan, Inc.  
500 Dallas Street, Suite 1000  
Houston, TX 77002

RE: Kinder Morgan, Inc., CPF No. 5-2007-1008

Dear Mr. Kinder:

Enclosed is the Final Order issued in the above-referenced case. It makes findings of violation, assesses a civil penalty of $39,000, specifies actions that need to be taken by Kinder Morgan to comply with the pipeline safety regulations, and withdraws an allegation of violation and a warning item. 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, Western Region, this enforcement action will be closed. Your receipt of the Final Order constitutes service of that document under 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: Chris Hoidal, Director, Western Region, PHMSA  
Robert Hogfoss, Hunton & Williams, LLP  
Bank of America Plaza, Suite 4100  
600 Peachtree Street, NE, Atlanta, GA 30308-2216

CERTIFIED MAIL – RETURN RECEIPT REQUESTED [7005 0390 0005 6162 5777]
In the Matter of

Kinder Morgan, Inc.,

Respondent.

CPF No. 5-2007-1008

FINAL ORDER

From August 14 to 18 and August 28 to September 1, 2006, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), inspected the Integrity Management Program (IMP) of Kinder Morgan, Inc. (Kinder Morgan or Respondent), then the operator of 10 natural gas pipeline systems in 13 different states, at its offices in Lakewood, Colorado.

As a result of that inspection, the Director, Western Region, OPS (Director), issued to Kinder Morgan, by letter dated June 11, 2007, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice alleged that Kinder Morgan had committed certain violations of Subpart O (Gas Transmission Pipeline Integrity Management), Part 192, Title 49, Code of Federal Regulations. The Notice proposed assessing Kinder Morgan a civil penalty of $78,000 for the alleged violations and ordering the company to take certain corrective actions.

Kinder Morgan responded to the Notice by letter dated July 12, 2007, contesting the allegations of violation and requesting a hearing (Response). The company later supplemented its Response by letter dated February 15, 2008, providing additional information and legal argument (Supplemental Response). On February 26, 2008, PHMSA convened an informal hearing, with an attorney from the Office of Chief Counsel presiding. Finally, on March 26, 2008, Kinder Morgan submitted a timely post-hearing brief (Brief) for the record.

FINDING OF VIOLATION

Item 1 of the Notice alleged that Kinder Morgan violated 49 C.F.R. § 192.905(a), which states, in relevant part:

§ 192.905 How does an operator identify a high consequence area?
   a) General. To determine which segments of an operator's
transmission pipeline system are covered by this subpart, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in § 192.903 to identify a high consequence area. An operator may apply one method to its entire pipeline system, or an operator may apply one method to individual portions of the pipeline system. An operator must describe in its integrity management program which method it is applying to each portion of the operator's pipeline system. The description must include the potential impact radius when utilized to establish a high consequence area. (See appendix E.I. for guidance on identifying high consequence areas.)

The Notice alleged that Kinder Morgan violated 49 C.F.R. § 192.905(a) by failing to properly identify all of the High Consequence Areas (HCAs)\(^1\) that could be affected by the operation of its pipeline system. In particular, the Notice alleged that Kinder Morgan failed to follow its own

\(^1\) An HCA is defined in § 192.903 as:

... an area established by one of the methods described in paragraphs (1) or (2) as follows:

1. An area defined as--
   (i) A Class 3 location under § 192.5; or
   (ii) A Class 4 location under § 192.5; or
   (iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
   (iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.

2. The area within a potential impact circle containing--
   (i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or
   (ii) An identified site.

3. Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See Figure E.I.A. in appendix E.)

4. If in identifying a high consequence area under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy with a distance of 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 feet (200 meters) to the area of the potential impact circle (i.e., the prorated number of buildings intended for human occupancy is equal to 20 x (660 feet) [or 200 meters]/potential impact radius in feet [or meters]).
written procedure\textsuperscript{2} for using the “potential impact circle” method\textsuperscript{3} to identify HCAs.

In support of that allegation, the Notice stated that when determining whether large areas (such as schools, parks or areas of public assembly)\textsuperscript{4} qualify as HCAs, Respondent’s procedure called for the gathering of GPS data points at the outside corner boundaries or areas nearest to its pipeline. However, according to the Notice, Kinder Morgan failed to follow such procedure and, as a consequence, underestimated the size of the HCAs.

Kinder Morgan does not dispute the allegation that it failed to follow its own HCA-identification procedure, but instead raises a number of other arguments, only three of which warrant further consideration here. Those arguments concern the validity of the company’s interpretation of the IMP regulations in identifying HCAs, the significance of its actions in exceeding the minimum regulatory standards, and the alleged mootness of the underlying allegation. For the following reasons, I find none of these arguments persuasive.

First, Kinder Morgan argues that PHMSA’s initial IMP regulations relating to “identified sites” lacked clarity.\textsuperscript{5} For example, Respondent states that PHMSA had to clarify that § 192.905 “allowed operators to use existing data on the density of buildings intended for human occupancy near pipelines, pro-rating any potential impact circles larger than 660 feet in diameter, until December 17, 2006.”\textsuperscript{6} However, the pro-rating provision cited by Kinder Morgan only applied to the determination of whether a potential impact circle (PIC) of a certain radius contained “20 or more buildings intended for human occupancy,” not whether such a PIC


\textsuperscript{3} As defined in 49 C.F.R. § 192.903, a “potential impact circle is a circle of radius equal to the potential impact radius (PIR).” That same regulation states that “[p]otential impact radius (PIR) means the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property. PIR is determined by the formula $r = 0.69\sqrt{(pd^2)}$, where ‘$r$’ is the radius of a circular area in feet surrounding the point of failure, ‘$p$’ is the maximum allowable operating pressure (MAOP) in the pipeline segment in pounds per square inch and ‘$d$’ is the nominal diameter of the pipeline in inches…” Id.

\textsuperscript{4} There are three different types of “identified sites” in the IMP regulations. The first is “[a]n outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period,” and that “include[s] but [is] not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, or areas outside a rural building such as a religious facility.” 49 C.F.R. § 192.903. The second is “[a] building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)-month period,” and that “include[s], but [is] not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks.” Id. The third is “[a] facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate,” and that “include[s] but [is] not limited to[,] hospitals, prisons, schools, day-care facilities, retirement facilities or assisted-living facilities.” Id.

\textsuperscript{5} Supplemental Response at 2; Brief at 2.

\textsuperscript{6} Brief at 2.
contained other types of identified sites, including large outside areas or open structures.\textsuperscript{7}

Therefore, that formula neither relates to nor justifies Respondent’s undisputed failure to follow its own procedure for determining whether “large areas” qualified as HCAs.

Moreover, Kinder Morgan wrote the procedure in question more than a year after PHMSA completed the extensive rulemaking that led to the initial IMP regulations, after this agency had released nearly three dozen guidance documents to assist operators in completing the HCA-identification process.\textsuperscript{8} Thus, I must reject the general argument that a lack of clarity in the IMP regulations somehow impaired Kinder Morgan’s ability to develop and follow a compliant HCA-identification procedure.

Second, Kinder Morgan argues that the company’s actual HCA identification process, even if contrary to its own procedure, exceeded the minimum regulatory requirement that operators assess at least 50% of its pipeline segments that could affect HCAs by a certain date.\textsuperscript{9} The fundamental flaw in this argument is that it disregards an operator’s equally applicable obligation to “develop and follow” its own written IMP. Indeed, that duty is critical to the success of PHMSA’s performance-based regime for ensuring pipeline integrity under Subpart O.\textsuperscript{10} Therefore, regardless of whether Respondent met or exceeded its other regulatory obligations, Kinder Morgan still violated § 192.905(a) by failing to follow its own procedure for identifying HCAs.

Third, Kinder Morgan argues that the company revised its procedure\textsuperscript{11} and performed a new HCA assessment after the inspection but before the issuance of this Notice, thereby rendering the allegation in Item 1 moot.\textsuperscript{12} However, the actions taken by an operator to address a prior violation or to ensure prospective compliance do not automatically render an enforcement proceeding moot. Further, PHMSA’s interest in collecting the civil penalty proposed in Item 1

\textsuperscript{7} Compare 49 C.F.R. § 192.903 (“If in identifying a high consequence area under . . . [the potential impact circle method], the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy with a distance of 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006.”) with 49 C.F.R. § 192.903 (defining “identified site” as “[a]n outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period . . . or [a] building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)-month period.”) (emphasis added).

\textsuperscript{8} http://primis.phmsa.dot.gov/gasimp/FaqList.gim?c=1#top5 (last accessed April 2, 2009).

\textsuperscript{9} Response at 2; Brief at 3.

\textsuperscript{10} 49 C.F.R. § 192.907(a).

\textsuperscript{11} For example, Kinder Morgan notes that after the OPS inspection, but before December 17, 2006, the company revised its HCA-identification procedure “to add an additional 40 foot buffer to each [potential impact radius], to account for GIS inaccuracies.” Brief at 3 (citing Kinder Morgan Operations and Maintenance Manual Procedure 220, Section 3.5, Revised (Jan. 1, 2008)).

\textsuperscript{12} Supplemental Response at 2; Brief at 3.
clearly provides the “concrete interest” needed to defeat any claim of mootness in this case.\textsuperscript{13} Thus, this argument also lacks merit.

For these reasons, I find that Kinder Morgan violated 49 C.F.R. § 192.905(a) by failing to properly identify all of the HCAs that could be affected by the operation of its pipeline system.

This finding of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

\textbf{WITHDRAWAL OF ALLEGATION}

\textbf{Item 2} of the Notice alleged that Kinder Morgan violated 49 C.F.R. § 192.917(e)(5). That regulation provides, in relevant part:

\begin{quote}
\textbf{§ 192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?}

(a) \textit{Threat identification}. An operator must identify and evaluate all potential threats to each covered pipeline segment. Potential threats that an operator must consider include, but are not limited to, the threats listed in ASME/ANSI B31.8S (incorporated by reference, see § 192.7), section 2, which are grouped under the following four categories:

(1) Time dependent threats such as internal corrosion, external corrosion, and stress corrosion cracking; . . .

(e) \textit{Actions to address particular threats}. If an operator identifies any of the following threats, the operator must take the following actions to address the threat. . . .

(5) \textit{Corrosion}. If an operator identifies corrosion on a covered pipeline segment that could adversely affect the integrity of the line (conditions specified in § 192.933), the operator must evaluate and remediate, as necessary, all pipeline segments (both covered and non-covered) with similar material coating and environmental characteristics. An operator must establish a schedule for evaluating and remediating, as necessary, the similar segments that is consistent with the operator's established operating and maintenance procedures under part 192 for testing and repair.
\end{quote}

The Notice alleged that Kinder Morgan violated 49 C.F.R. § 192.917 by failing to identify and evaluate all potential threats to each covered pipeline segment. In supporting this allegation, the Notice stated that Respondent “did not always perform an evaluation of similar pipeline segments (both covered and non-covered) when significant corrosion is found inside an HCA.” The Notice

cited as evidence a corrosion analysis record, dated September 20, 2005, which Kinder Morgan had provided to the OPS inspector at the time of the inspection.

Kinder Morgan disputes this allegation on several grounds. First, Respondent argues that the term “evaluate” lacks clarity in § 192.917 and that PHMSA staff stated during the hearing that subparagraph (e)(5) is usually applied in the context of direct assessments, a procedure that Kinder Morgan does not presently use on its transmission system. Second, the company argues that it had a procedure for performing like-pipeline-segment corrosion evaluations at the time of the OPS inspection and that it followed such procedure when remediating immediate repair conditions, as documented by its alignment sheets, action plans, and closure reports. Third, Kinder Morgan notes that it recently revised its procedure to be consistent with guidance provided by PHMSA, and that this violation was not among the 55 areas of concern mentioned in OPS’s 2006 post-inspection report.

Finally, Kinder Morgan argues that, on August 14, 2006, it sold some of the pipeline segments in question; therefore, it may not be the real party in interest in this proceeding.

Upon consideration of all of the evidence, I find that the record does not contain a sufficient basis for finding Kinder Morgan in violation of 49 C.F.R. § 192.917(e)(5). First, the evidence confirms that Respondent in fact had a procedure in place for performing like-pipeline-segment corrosion evaluations at the time of the OPS inspection and that it properly followed that procedure in remediating an immediate repair on the Read Junction to Collbran line in September 2005. The evidence also shows — both before and after the effective date of the IMP regulations — that Kinder Morgan repaired other pipeline segments with corrosion.

---

\[14\] Supplemental Response at 2; Brief at 4.

\[15\] Kinder has introduced the relevant portions of that procedure, revised as of June 1, 2006, the text of which states:

**3.12 High Consequence Area Remediation** [192.917(e)(5), 192.933]

If corrosion that could adversely affect pipeline integrity is identified in an HCA segment, Risk Engineering will evaluate other non-covered pipeline segments with similar material, coating, and environmental characteristics. If the evaluation identifies the potential for corrosion that could adversely affect pipeline integrity on other pipeline segments, Risk Engineering will establish a schedule for evaluating and remediating these similar segments as necessary in conformance with applicable O&M Procedures.

Brief at 4, Exhibit 11.

\[16\] Kinder Morgan has submitted an unlabeled and undated printout of what it describes as an “immediate repair listing.” Brief at 4, Exhibit 8F. Six different entries are noted in that document, and those entries apparently relate to repairs performed on various pipeline segments in 2001, 2002, 2004, and 2005 following inline inspection (ILI) tool runs. In addition, Kinder Morgan has submitted another document describing its testing and repair of the Read Junction to Collbran line following a September 2005 ILI tool run. Brief at 4, Exhibit 12.

\[17\] Amended Statement of Issues at 2.
Second, neither the Notice nor the Violation Report identified a specific instance where Kinder Morgan failed to conduct a like-pipeline-segment corrosion evaluation. On the contrary, the only relevant evidence cited by OPS was a September 2005 corrosion analysis record, a document which (at least in that particular instance) establishes Kinder Morgan’s compliance with the cited regulation.

For these reasons, I find that PHMSA has not met its burden of proving that Kinder Morgan failed to perform like-pipeline-segment corrosion evaluations. Accordingly, I am withdrawing Item 2 of the Notice without prejudice and without addressing Kinder Morgan’s remaining arguments.

**ASSESSMENT OF PENALTY**

Under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, in determining the amount of a civil penalty, I 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 Respondent’s ability to pay the penalty and any effect that the penalty may have on its ability to continue doing business; and the good faith of Respondent in attempting to comply with the pipeline safety regulations. In addition, I may consider the economic benefit gained from the violation without any reduction because of subsequent damages, and such other matters as justice may require.

The Notice proposed a total civil penalty of $78,000. That included a $39,000 penalty for Item 1, relating to the alleged violation of 49 C.F.R. § 192.905(a), and a $39,000 penalty for Item 2, relating to the alleged violation of 49 C.F.R. § 192.917. Having already found that the evidence of record is insufficient to prove a violation § 192.917, I am hereby withdrawing the proposed $39,000 civil penalty for Item 2.

With regard to Item 1, Kinder Morgan has not presented any persuasive basis for reducing or eliminating the proposed civil penalty. Respondent failed without justification to follow its own written procedure and that failure led to a significant under-reporting of the HCAs that could be affected by the operation of the company’s pipeline system. If left uncorrected, such an error would diminish the effectiveness of the other risk-based requirements imposed by the IMP regulations and create a potential threat to public safety. Kinder Morgan also created the procedure in question, a fact that undermines any purported ambiguity or difficulty in abiding by its terms. In addition, Respondent has the ability to pay the proposed civil penalty amount without suffering any detrimental business or operational effects. Accordingly, upon consideration of all of the evidence and the assessment criteria, I assess a civil penalty of $39,000 for Respondent’s violation of 49 C.F.R. § 192.905(a).

---

PAYMENT OF PENALTY

Payment of the $39,000 civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this payment 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 (AMZ-341), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 269039, Oklahoma City, OK 73125; (405) 954-8893.

Failure to pay the $39,000 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 United States District Court.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Item 1, for violations of 49 C.F.R. § 192.905(a). Under 49 U.S.C. § 60118(a), each person who engages in the transportation of gas or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. Pursuant to the former authorities 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. Specifically, Respondent must:

1. With regard to Respondent’s violation of 49 C.F.R. § 192.905(a) (Item 1):
   (a) Re-examine all areas containing identified sites and properly determine the location of the outside boundaries of those identified sites in accordance with the requirements of Kinder Morgan’s O&M Procedure 220, Section 3.7;
   (b) Use that information to update Kinder Morgan’s HCA mileage and determine whether these HCAs have been properly assessed and/or repaired in accordance with all applicable regulatory requirements; and
   (c) Submit a report to the Director, identifying all changes made in the company’s HCA mileage, including those that resulted from the re-examination of areas containing identified sites and the divestiture of particular pipeline assets, describing all repairs made as a result of the new HCA mileage, and discussing what types of anomalies were repaired, if any.

2. Complete the above actions within 60 days of its receipt of this Final Order.

3. Maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director, Western Region, PHMSA. Costs shall 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.

**WARNING ITEM**

The warning concerned Respondent’s alleged violation of 49 C.F.R. § 192.937, for failing to select the methods that would be used to perform the integrity reassessment of pipeline segments that had already received a baseline integrity assessment. Kinder Morgan disputes this allegation and argues that its IMP described the pipeline threat assessment methods in use at the time of the OPS inspection, that those methods conformed to PHMSA’s guidance on the issue, and that the IMP regulations do not establish a specific timeframe for selecting integrity reassessment methods.

I find that Kinder Morgan’s arguments are reasonable and persuasive. Section 192.937 requires that an operator select an appropriate time interval, not to exceed seven years, for conducting an integrity reassessment and a proper method for conducting such reassessments. However, the regulation fails to explicitly require that an operator select a reassessment method within a particular timeframe and PHMSA’s guidance on the issue suggests that the critical timeframe in terms of method selection is before the next integrity reassessment, not after the performance of a baseline assessment. Given the text of the regulation, the agency’s guidance documents, and

---

19 Kinder Morgan supports this argument by citing a PHMSA guidance document, FAQ 46, that states:

**Question:** What are acceptable integrity assessment methods?

**Answer:** Internal inspection, pressure testing, and direct assessment are acceptable methods to assess pipeline integrity (192.921(a), 192.937(c)). However, the method(s) selected must be appropriate to address the identified threats to the line being assessed. (Thus, for example, direct assessment can only be used where the threats are external or internal corrosion or stress corrosion cracking). Confirmatory direct assessment can be used for assessments conducted on no longer than seven-year intervals when re-assessments conducted using these specified methods are scheduled to occur at intervals longer than 7 years, and when the threats of concern are corrosion. Other technologies that an operator can demonstrate provide an equivalent understanding of pipe condition may be acceptable methods. However, operators must inform OPS 180 days before conducting an assessment using other technologies.


20 As PHMSA stated in FAQ 217, Justifying Assessment Methods Prior to Use:

**Assessment methods must be identified, and demonstrated to be capable of addressing applicable threats, before an assessment is conducted.** At the same time, OPS recognizes that last-minute problems arise and that plans must often change as a result. It is acceptable for operators to change their assessment plans due to unexpected situations, but the reasons for the change and the acceptability of a changed assessment method should be documented when the change is made, prior to implementing the assessment.

the absence of any additional supporting rationale, I cannot find that Kinder Morgan committed a probable violation of 49 C.F.R. § 192.937. Accordingly, I am hereby withdrawing Item 3 of the Notice without prejudice.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Final Order. The petition must be received within 20 days of Respondent’s receipt of this Final Order and must contain a brief statement of the issue(s). The terms of the order, including any required corrective action and amendment of procedures, shall remain in full force and effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order shall be effective upon receipt.

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Date Issued