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U.S. Department
of Transportation
**Pipeline and
Hazardous Materials Safety
Administration**

12300 W Dakota Ave , Suite 110
Lakewood, CO 80228

NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 11, 2007

Mr. Dwayne Burton
VP Engineering, Operations and Project Management
Kinder Morgan, Inc.
500 Dallas Street, Suite 1000
Houston, TX 77002

CPF 5-2007-1008

Dear Mr. Burton:

On August 14-18 and August 28–September 1, 2006, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected your integrity management program in Lakewood, Colorado.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violation(s) are:

1. **§192.905 How does an operator identify a high consequence area?**

   §192.905 (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.)

§192.903 What definitions apply to this subpart?

The following definitions apply to this subpart:

Assessment is the use of testing techniques as allowed in this subpart to ascertain the condition of a covered pipeline segment.

Confirmatory direct assessment is an integrity assessment method using more focused application of the principles and techniques of direct assessment to identify internal and external corrosion in a covered transmission pipeline segment.

Covered segment or covered pipeline segment means a segment of gas transmission pipeline located in a high consequence area. The terms gas and transmission line are defined in § 192.3.

Direct assessment is an integrity assessment method that utilizes a process to evaluate certain threats (i.e., external corrosion, internal corrosion and stress corrosion cracking) to a covered pipeline segment's integrity. The process includes the gathering and integration of risk factor data, indirect examination or analysis to identify areas of suspected corrosion, direct examination of the pipeline in these areas, and post assessment evaluation.

High consequence area means 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 within a distance 660 feet (200 meters) from the centerline of the pipeline until December17, 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])**2]).

Identified site means each of the following areas:
(a) An 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. (The days need not be consecutive.) Examples include but are 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; or
(b) 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. (The days and weeks need not be consecutive.) Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks; or
(c) A facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate. Examples include but are not limited to hospitals, prisons, schools, day-care facilities, retirement facilities or assisted-living facilities.
Potential impact circle is a circle of radius equal to the potential impact radius (PIR).
Potential 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* (square root of (p*d \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.

Note: 0.69 is the factor for natural gas. This number will vary for other gases depending upon their heat of combustion. An operator transporting gas other than

natural gas must use section 3.2 of ASME/ANSI B31.8S-2001 (Supplement to ASME B31.8; ibr, see § 192.7) to calculate the impact radius formula.

Remediation is a repair or mitigation activity an operator takes on a covered segment to limit or reduce the probability of an undesired event occurring or the expected consequences from the event.

- **Item 1A: §Part 192.903 High consequence area means an area established by one of the methods described in paragraphs (1) or (2) as follows: (2)ii**

Kinder Morgan, Inc. (KMI) O&M Procedure 220, Section 3.7 requires that large areas (schools, parks, areas of assembly) have the location of the outside corner boundaries or areas closest to the pipeline defining a potential identified site be documented by GPS In practice KMI has not followed their own procedure and has identified structures as a point which is not consistently the closest or more conservative location for defining the length of an HCA. This practice has resulted in HCA length being under-called.
Evidence: Screenshot of the Sand Draw TO (Requested Document list line 22).

2. **§192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?**
(a) Threat identification...
(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...
(e) 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.
(1) Third party damage...
(5) 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.

- **Item 2A: §192.917(e)(5)**

  KMI did not always perform an evaluation of similar pipeline segments (both covered and non-covered) when significant corrosion is found inside an HCA.

  Evidence: O&M Procedure 213 RMNG Analysis on Corrosion (on disk, 8/31/2006 document request).

3. **§192.937 What is a continual process of evaluation and assessment to maintain a pipeline's integrity?**

   (a) General. .....

   (b) Evaluation. An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in § 192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat analysis specified in § 192.917(d) For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§ 192.917), and decisions about remediation (§ 192.933) and additional preventive and mitigative actions (§ 192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

- **Item 3A: §192.937(b)(c)**

  As of the date of the inspection, KMI has not selected the methods to be used for the next integrity reassessment for those baseline assessments that have been completed.

  Evidence: IMP Appendix C through L (BAP and other documentation does not reflect a re-assessment plan).

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed $100,000 for each violation for each day the violation persists up to a maximum of $1,000,000 for any related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of $78,000 as follows:

Item number	PENALTY
1A	$39,000
2A	$39,000
Total	$78,000

Warning Items

With respect to item 3A we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct this item. Be advised that failure to do so may result in KMI being subject to additional enforcement action.

Proposed Compliance Order

With respect to items 1A and 2A pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to KMI. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 5-2007-1008** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

cc: PHP-60 Compliance Registry
PHP-500 J. Gilliam (#116969)

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Kinder Morgan, Inc. a Compliance Order incorporating the following remedial requirements to ensure the compliance of Kinder Morgan, Inc. with the pipeline safety regulations:

1 In regard to Item Number 1A of the Notice pertaining to identification of HCA Mileage associated with identified sites, KMI must re-examine all areas containing identified sites and follow their own procedure for determining the true outside boundaries for identified sites. Then KMI must update their HCA mileage and determine if these areas have been assessed and if they have ensure all repairs according to the regulator requirements have in fact been made. KMI must report all changes to HCA mileage, repairs made as a result of new mileage added and what types of anomalies where in fact repaired if necessary. One copy of this report must be forwarded to the Director of the PHMSA Western Region.

2. In regard to Item Number 2A of the Notice pertaining to KMI did not always perform an evaluation of similar pipeline segments (both covered and non-covered) when significant corrosion is found inside an HCA., KMI must establish procedures that require KMI personnel to conduct an analysis of all similar pipe (both covered and non-covered) to determine if similar conditions that threaten the integrity of the pipeline do not exist. One copy of this analysis must be forwarded to the Director of the PHMSA Western Region.

3. KMI will have 60 days after receipt of a Final Order for this case to complete the items noted above.

4 KMI shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. 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.