



Panhandle Eastern Pipe Line
Trunkline Gas
Trunkline LNG
Sea Robin Pipeline
Florida Gas Transmission

5444 Westheimer Road
Houston, TX 77056-5306
P.O. Box 4967
Houston, TX 77210-4967
713.989.7000

August 6, 2008

RECEIVED AUG 13 2008

Certified Mail – Return Receipt Requested

Ivan A. Huntoon
Director, Central Region
Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Pipeline Safety
901 Locust Street, Suite 462
Kansas City, MO 64106-2641

**RE: CPF 3-2008-1002 (July 1, 2008 PHMSA Letter)
Response and Request for In-Person Hearing per 49 C.F.R §190.211**

Dear Mr. Huntoon:

In correspondence dated July 1, 2008 and received in our office on July 7, 2008 you have alleged that Panhandle Eastern Pipeline Company (“PEPL”) committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. As noted by PHMSA, these allegations stem from an investigation and inspection of a pipeline incident involving PEPL’s Glenarm 200 Line near Pawnee, Illinois on April 29, 2007. A civil penalty of \$180,000 was proposed in conjunction with this alleged violation.

PEPL contests the penalty imposed by PHMSA as excessive considering the proactive presentation of a remedial action plan, cooperation that PEPL exhibited during and after the incident and additional work performed by PEPL on lines not associated with the incident. PEPL voluntarily undertook these mitigative efforts despite the absence of any Corrective Action Order (CAO). Further, PHMSA did not consider that PEPL had scheduled an ILI run on the Glenarm 200, in this valve section prior to the occurrence of the incident. As there are no HCAs in this segment, such an inspection was not a regulatory requirement. In late 2006, previous to the failure, PEPL had modified this section of the Glenarm 200 to accommodate a “smart pig” for the ILI inspection that was already scheduled to be performed in July of 2007. Due to PEPL’s quick and professional response to the incident, there were no injuries and the fire quickly self-extinguished. For these reasons and those detailed below, PEPL requests PHMSA rescind or significantly reduce the proposed civil penalty.

PEPL was proactive in the remediation and investigation of the failure. PEPL provided PHMSA with an extensive analysis and test plan without PHMSA issuing a CAO and was receptive to every PHMSA request regarding the incident. PEPL performed the following and shared the results with PHMSA during a meeting with PHMSA on September 7, 2007, in PHMSA’s Kansas City office:

- PEPL conducted a comprehensive investigation to determine the failure mechanism and the root cause of that mechanism, and made subsequent recommendations to prevent potential

reoccurrence. Additionally, PEPL conducted a threat assessment for the Glenarm 200 line segment, applying information gained from the failure investigation and determined applicable integrity assessment work to be conducted. PEPL provided PHMSA with a report on the results of that threat analysis and the planned integrity assessments as well as a final report which included the results from the metallurgical testing, prepared in accordance with the PHMSA protocols as follows:

- Background information
 - Visual and non destructive examinations
 - Physical measurements
 - Corrosion examination
 - Fractography examination
 - Metallographic examination
 - Mechanical properties
-
- PEPL utilized a third party contractor, CC Technologies, to perform the Corrosion, Fractography, and Metallurgical examinations in their lab as part of the failure investigation.
 - After repair of the 200 line at the Incident location, PEPL completed an erosion control project to protect this line, at the failure site from further potential exposures.
 - PEPL performed a depth of cover and Close Interval Survey (CIS) on all four of PEPL's mainlines from the Glenarm Compressor to Glenarm 3 Gate to confirm adequate cathodic protection and visually inspect for exposed pipe. No low potentials or new exposures were discovered.
 - PEPL ran a high definition caliper tool on the 200 line on May 16th, 2007.
 - PEPL ran a high resolution Magnetic Flux Leakage (MFL) tool on the 200 line, after the caliper tool run, on May 24th, 2007.
 - PEPL accelerated the remediation of sixteen (16) anomalies identified from the caliper and MFL tool inspections in August 2007 that based on the analysis of the ILI data would potentially fail at 1.25 X MAOP. Three (3) other anomalies found with the ILI had been previously remediated.
 - PEPL investigated the performance of the Emergency Responders during the Incident and identified areas of improvement. PEPL met with emergency responders from Midland, Pawnee, Riverton and Divernon, who responded to this incident. Improvements were addressed by further education.
 - Letters were distributed to inform adjacent landowners and their neighbors regarding the efforts that PEPL was undertaking to improve the integrity of the pipeline.
 - PEPL reviewed its current Shallow Cover/Exposed Pipe procedure to verify that these were followed at this location and determined that the current procedures were followed. PEPL reviewed the process for management of known line exposures seeking areas of potential improvement and initiated changes to the procedures to implement them.
 - PEPL reevaluated and remediated an existing exposure on the Glenarm 100 line. No new exposures were discovered during the 2007 CIS/depth of cover survey on the 4 Glenarm mainlines (100, 200, 300, and 400).

PEPL has met and exceeded PHMSA's goals for pursuing enforcement action by our quick and proactive implementation of the PEPL mitigative and preventative action plan to identify and mitigate any potential gaps in PEPL's procedures. PEPL has strived to avoid non-compliance by quickly rectifying the potential gaps identified in PEPL's procedures. PEPL learned from this incident and applied this learning experience to other parts of PEPL's system by making modifications to the Shallow Cover/Exposed Pipe procedure.

In PHMSA's allegation, PHMSA is citing PEPL for not maintaining pipeline coating sufficient to prevent corrosion on the portion of pipeline exposed to the atmosphere where PHMSA contends that the failure occurred. PHMSA additionally alleges that PEPL's failure to address the poor condition of the coating in this area was a major factor in the eventual failure of the pipeline.

“Panhandle did not maintain pipe coating sufficient to prevent corrosion on the portion of its pipeline exposed to the atmosphere where the failure occurred. Panhandle's atmospheric coating inspection records revealed that Panhandle personnel became aware of the poor condition of the coating in 2003, but no action was taken by Panhandle to remediate the section. In 2005, the coating at this location was again noted on Panhandle's inspection records as being in poor condition and needing remediation and again no action was taken. The failure to address the poor coating at this location was a major factor in the eventual failure of the pipeline.”

Neither PEPL nor CC Technologies were able to determine whether the external corrosion defect that caused the failure was buried or exposed to the atmosphere. It was determined that the corrosion was external and that the failure originated at the 11:50 position. In a presentation to PHMSA, the failure of the corrosion control systems to mitigate growth of the failed corrosion defect can be attributed to one of the following causes: atmospheric corrosion, cathodic shielding, and/or variations in backfill resistivity due to diminished cover.

In the allegation above, PHMSA contends that:

- PEPL did not maintain pipe coating sufficient to prevent corrosion on the portion of its pipeline exposed to the atmosphere where the failure occurred.
- PEPL's atmospheric inspection records revealed the PEPL became aware of the poor coating, but took no action in 2003 to remediate the section.
- That again in 2005 PEPL noted the coating condition as poor and needing remediation, but took no action.

PEPL does not dispute that the atmospheric coating system installed at this location was in poor condition. However, PEPL disputes the PHMSA claim that PEPL records indicate that the coating needed remediation. PEPL records which were provided to PHMSA clearly indicate that the exposure in question was classified as Priority C – Remediation > 5 years.

PEPL comments recorded during inspections of the exposed pipe segment are as follows:

2003 – “This is D/S of the marker at the east end of Zion Rd. at about the end of the oil road 6' of pipe exposed. Coating is in poor condition, the pipe is rusty but there is no pitting visible. 20' of recoat would be required.”

10/25/2004 – “No change”

10/14/2005 – “No change”

9/27/2006 – “No change”

PHMSA alleges that PEPL's failure to address the poor condition of the coating in this area was a major factor in the eventual failure of the pipeline.

PEPL disputes the PHMSA allegation that "failure to address the poor coating at this location was a major factor in the eventual failure of the pipeline." The PEPL Midwest Division remediated 25 exposed / shallow pipe segments between 2003 and 2007. Annual reviews of all exposed and shallow pipe segments were conducted to determine which segments were the highest priorities for remediation during each budget cycle. The failed pipe segment was to be remediated in 2007.

The 2003 CIS / Depth of Cover survey that initially identified the failed pipe segment also identified one location where significant corrosion was observed. This location was prioritized based on inspection results and remediated in 2003.

Although Panhandle could not conclusively determine that the failure did not occur in a segment of piping exposed to the atmosphere, initial inspection records indicated that the pipe surface was "rusty but there is no pitting visible". No indications of atmospheric corrosion beyond a light surface oxide (i.e. "rusty") were visible during the 2003, 2004, 2005, or 2006 inspections.

PHMSA alleges PEPL's written operating procedure 2-5020 requires the repair and removal of the poor coating once it is noted that remediation is needed and that PEPL failed to follow its own procedures for taking action to remediate pipe coating when the need has been identified.

SOP 2-5020 does not require immediate remediation as alleged by PHMSA. PEPL's procedures call for the scheduled mitigation of these areas based upon inspection and ranking.

1. SOP 2-5020 does not contain language requiring repair and removal of poor coating once it is noted that remediation is necessary. All versions of the SOP indicate that remediation should be scheduled.
2. Panhandle procedures do not contain maximum or recommended intervals for remediation of atmospheric coatings. The only interval specified - Priority C - Remediation > 5 years, was in the Shallow Cover Database.
3. PHMSA has issued guidance on maximum intervals for corrosion control system remediation. That guidance states that remediation should be initiated prior to the next inspection period.
4. PHMSA did not specify which portion of the \$180,000 proposed fine was related to violation of internal procedures. In the event that PHMSA does not rescind this proposed civil penalty in its entirety, PEPL requests additional specificity as to what sections of SOP 2-5020 are believed to have been violated and a breakdown of the components of the proposed civil penalty.

As always, PEPL strives to protect people first, then property and the environment. There were no deaths or injuries as a result of this incident. Property damage was limited to minor damage to one residence, several farm out-buildings, vegetation and one farm animal. There were several unsubstantiated reports of further damage. Contrary to media reports, evacuations were limited to one resident located approximately 550 feet away who self-evacuated and another residence more than one-half mile away evacuated by emergency responders.

If PHMSA does accept PEPL's explanations, grant the relief sought, and rescind the noted allegations, then by this response PEPL requests an in-person hearing on these issues and the proposed civil penalties. PEPL reserves its right to be represented by counsel at a hearing and would plan to have a court reporter record the proceedings.

PEPL will discuss the following issues.

- PEPL's cooperative effort and good faith in achieving improvements.
- PEPL's commitment to extend its investigative efforts to lines not affected by the incident.
- PEPL's use of lessons learned to modify procedures which could prevent future occurrences.

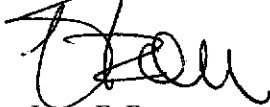
PEPL Response to the Proposed Penalties

PEPL objects to and contests all penalties proposed.

PEPL Request for Hearing

As noted above regarding the NOPV, PEPL contests PHMSA's conclusions and the proposed penalty, and accordingly requests a hearing as stipulated in 49 C.F.R §190.211 addressing all matters presented in the PHMSA July 1, 2008 letter referenced above. The principal issues to be raised at hearing are listed in this letter. PEPL reserves the right to be represented by counsel during the hearing and plans to have a court reporter present to document the proceedings.

Sincerely,



Jerry F. Rau
Director of Pipeline Integrity

Attachment:

July 1 PHMSA Letter (CPF 4-2007-2005)
SOP 2-5020



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

901 Locust Street, Suite 462
Kansas City, MO 64108-2641

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED CIVIL PENALTY**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 1, 2008

Mr. Eric Amundsen
Vice President Technical Services
Panhandle Eastern Pipeline Co.
5444 Westheimer Road
Houston, TX 77056

CPF 3-2008-1002

Dear Mr. Amundsen:

On April 29, 2007, the Pipeline and Hazardous Materials Safety Administration (PHMSA) investigated an incident involving Panhandle Eastern Pipeline Company's 200 Line. The incident occurred about three miles east of the Glenarm Compressor Station near the town of Pawnee in Sangamon County Illinois. The incident resulted in the release of natural gas which ignited into a fire. As a result, several farm animals were killed and one residence was evacuated.

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 item inspected and the probable violation is:

1. §192.479 Atmospheric corrosion control; General.

- (a) Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.**
- (b) Coating material must be suitable for the prevention of atmospheric corrosion.**

Panhandle did not maintain pipe coating sufficient to prevent corrosion on the portion of its pipeline exposed to the atmosphere where the failure occurred. Panhandle's atmospheric inspection records revealed that Panhandle personnel became aware of the poor condition of the coating in 2003, but no action was taken by Panhandle to remediate the section. In 2005, the coating at this location was again noted on Panhandle's inspection records as being in poor condition and needing remediation and again no action was taken. The failure to address the poor coating at this location was a major factor in the eventual failure of the pipeline.

Additionally, Panhandle's written operating procedure 2-5020 requires the repair and removal of the poor coating once it is noted that remediation is needed. Therefore, Panhandle failed to follow its own procedures for taking action to remediate pipe coating when the need has been identified.

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 \$180,000 for Item 1.

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 3-2008-1002** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Ivan A. Huntoon
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*

Response Options for Pipeline Operators in Compliance Proceedings

The requirements of 49 C.F.R. Part 190, Subpart B (§§ 190.201–190.237) govern response to Notices issued by a Regional Director, Pipeline and Hazardous Materials Safety Administration (PHMSA).

Be advised that all material submitted by a respondent in response to an 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).

I. Procedures for Responding to a NOTICE OF PROBABLE VIOLATION:

Within 30 days of receipt of a Notice of Probable Violation, the respondent shall respond to the Regional Director who issued the Notice in the following way:

a. When the Notice contains a proposed CIVIL PENALTY* --

1. If you are not contesting any violations alleged in the Notice, pay the proposed civil penalty and advise the Regional Director of the payment. This authorizes PHMSA to make findings and to close the case with prejudice to the respondent. Payment terms are outlined below;
2. If you are not contesting any violations alleged in the Notice but wish to submit written explanations, information, or other materials you believe warrant mitigation of the civil penalty, you may submit such materials. This authorizes PHMSA to make findings and to issue a Final Order assessing a penalty amount up to the amount proposed in the Notice;
3. If you are contesting one or more of the items in the Notice but are not requesting an oral hearing, submit a written response to the allegations and/or seek elimination or mitigation of the proposed civil penalty. Refer to 49 C.F.R. § 190.225 for assessment considerations, which include the respondent's ability to pay and the effect on the respondent's ability to stay in business, upon which civil penalties are based; or
4. Request a hearing as described below to contest the allegations and/or proposed assessment of a civil penalty.

b. When the Notice contains a proposed COMPLIANCE ORDER* --

1. If you are not contesting the compliance order, notify the Regional Director that you intend to take the steps in the proposed compliance order;

2. If you are not contesting the compliance order but wish to submit written explanations, information, or other materials you believe warrant modification of the proposed compliance order in whole or in part, or you seek clarification of the terms of the proposed compliance order, you may submit such materials. This authorizes PHMSA to make findings and issue a compliance order;
3. If you are contesting the proposed compliance order but are not requesting an oral hearing, submit written explanations, information, or other materials in answer to the allegations in the Notice and stating your reasons for objecting to the proposed compliance order items in whole or in part; or
4. Request a hearing as described below to contest the allegations and/or proposed compliance order items.

c. When the Notice contains a WARNING ITEM --

No written response is required. The respondent is warned that if it does not take appropriate action to correct these items, enforcement action will be taken if a subsequent inspection reveals a violation.

* Failure of the respondent to respond to the Notice within 30 days of receipt constitutes a waiver of the right to contest the allegations in the Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in the Notice without further notice to the respondent and to issue a Final Order.

II. Procedures for Responding to a NOTICE OF AMENDMENT*--

Within 30 days of receipt of a Notice of Amendment, the respondent shall respond to the Regional Director who issued the Notice in the following way:

- a. If you are not contesting the Notice, notify the Regional Director of your plans to address the inadequacies identified in the Notice;
- b. If you are not contesting the Notice but wish to submit written explanations, information, or other materials you believe warrant modification of the Notice of Amendment in whole or in part, or you seek clarification of the terms of the Notice of Amendment, you may submit such materials. This authorizes PHMSA to make findings and issue an Order Directing Amendment;
- c. If you are contesting the Notice of Amendment but are not requesting an oral hearing, submit written explanations, information, or other materials in answer to the allegations in the Notice and stating your reasons for objecting to the Notice of Amendment items in whole or in part; or

d. Request a hearing as described below to contest the allegations in the Notice.

* Failure of the respondent to respond to the Notice within 30 days of receipt constitutes a waiver of the right to contest the allegations in the Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in the Notice without further notice to the respondent and to issue a Final Order.

III. **Procedure for Requesting a Hearing**

A request for a hearing must be in writing and accompanied by a statement of the issues that the respondent intends to raise at the hearing. The issues may relate to the allegations, new information, or to the proposed compliance order or proposed civil penalty amount. Refer to 49 C.F.R. § 190.225 for assessment considerations upon which civil penalties are based. A respondent's failure to specify an issue may result in waiver of the right to raise that issue at the hearing. The respondent's request must also indicate whether or not respondent will be represented by counsel at the hearing. Failure to request a hearing in writing within 30 days of receipt of a Notice waives the right to a hearing. In addition, if the amount of the proposed civil penalty or the proposed corrective action is less than \$10,000, the hearing will be held by telephone, unless the respondent submits a written request for an in-person hearing. Complete hearing procedures can be found at 49 C.F.R. § 190.211.

IV. **Extensions of Time**

An extension of time to prepare an appropriate response to a Notice may be granted, at the agency's discretion, following submittal of a written request to the Regional Director. The request must indicate the amount of time needed and the reasons for the extension. The request must be submitted within 30 days of receipt of the Notice.

V. **Freedom of Information Act**

Any material provided to PHMSA by the respondent, and materials prepared by PHMSA including the Notice and any order issued in this case, may be considered public information and subject to disclosure under the Freedom of Information Act (FOIA). If you believe the information you are providing is security sensitive, privileged, confidential or may cause your company competitive disadvantages, please clearly identify the material and provide justification why the documents, or portions of a document, should not be released under FOIA. If we receive a request for your material, we will notify you if PHMSA, after reviewing the materials and your provided justification, determines that withholding the materials does not meet any exemption provided under the FOIA. You may appeal the agency's decision to release material under the FOIA at that time. Your appeal will stay the release of those materials until a final decision is made.

VI. **Small Business Regulatory Enforcement Fairness Act Information**

The Small Business and Agricultural Regulatory Enforcement Ombudsman and 10 Regional Fairness Boards were established to receive comments from small businesses about federal agency enforcement actions. The Ombudsman will annually evaluate the enforcement activities and rate each agency's responsiveness to small business. If you

wish to comment on the enforcement actions of the Pipeline and Hazardous Materials Safety Administration, call 1-888-REG-FAIR (1-888-734-3247) or go to http://www.sba.gov/ombudsman/dsp_faq.html.

VII. **Payment Instructions**

Civil Penalty Payments of Less Than \$10,000

Payment of a civil penalty of less than \$10,000 proposed or assessed, under Subpart B of Part 190 of the Pipeline Safety Regulations can be made by certified check, money order or wire transfer. Payment by certified check or money order (containing the CPF Number for this case) should be made payable to the "Department of Transportation" and should be sent to:

Federal Aviation Administration
Mike Monroney Aeronautical Center
Financial Operations Division (AMZ-341) P.O. Box 25082
Oklahoma City, OK 73125-4915

Wire transfer payments of less than \$10,000 may be made through the Federal Reserve Communications System (Fedwire) to the account of the U.S. Treasury. Detailed instructions are provided below. Questions concerning wire transfer should be directed to the Financial Operations Division at (405) 954-8893, or at the above address.

Civil Penalty Payments of \$10,000 or more

Payment of a civil penalty of \$10,000 or more proposed or assessed under Subpart B of Part 190 of the Pipeline Safety Regulations must be made wire transfer (49 C.F.R. § 89.21 (b)(3)), through the Federal Reserve Communications System (Fedwire) to the account of the U.S. Treasury. Detailed instructions are provided below. Questions concerning wire transfers should be directed to the Financial Operations Division at (405) 954-8893, or at the above address.

INSTRUCTIONS FOR ELECTRONIC FUND TRANSFERS

(1) <u>RECEIVER ABA NO.</u> 021030004	(2) <u>TYPE/SUB-TYPE</u> (Provided by sending bank)
(3) <u>SENDING BANK ABA NO.</u> (Provided by sending bank)	(4) <u>SENDING BANK REF NO.</u> (Provided by sending bank)
(5) <u>AMOUNT</u>	(6) <u>SENDING BANK NAME</u> (Provided by sending bank)
(7) <u>RECEIVER NAME</u> TREAS NYC	(8) <u>PRODUCT CODE</u> (Normally CTR, or as provided by sending bank)
(9) <u>BENEFICIAL (BNF) = AGENCY LOCATION CODE</u> BNF = /ALC-69-14-0001	(10) <u>REASONS FOR PAYMENT</u> Example: PHMSA - CPF # / Ticket Number/Pipeline Assessment number

INSTRUCTIONS: You, as sender of the wire transfer, must provide the sending bank with the information for blocks (1), (5), (7), (9), and (10). The information provided in Blocks (1), (7), and (9) are constant and remain the same for all wire transfers to the Pipeline and Hazardous Materials Safety Administration, Department of Transportation.

Block #1 - RECEIVER ABA NO. - "021030004". Ensure the sending bank enters this 9-digit identification number; it represents the routing symbol for the U.S. Treasury at the Federal Reserve Bank in New York.

Block #5 - AMOUNT - You as the sender provide the amount of the transfer. Please be sure the transfer amount is punctuated with commas and a decimal point. **EXAMPLE: \$10,000.00**

Block #7 - RECEIVER NAME - "TREAS NYC". Ensure the sending bank enters this abbreviation. It must be used for all wire transfers to the Treasury Department.

Block #9 - BENEFICIAL - AGENCY LOCATION CODE - "BNF=/ALC-69-14-0001". Ensure the sending bank enters this information. This is the Agency Location Code for the Pipeline and Hazardous Materials Safety Administration, Department of Transportation.

Block #10 - REASON FOR PAYMENT - "AC-payment for PHMSA Case # / To ensure your wire transfer is credited properly, enter the case number/ticket number or Pipeline Assessment number, and country."

NOTE: A wire transfer must comply with the format and instructions or the Department cannot accept the wire transfer. You as the sender can assist this process by notifying the Financial Operations Division (405) 954-8893 at the time you send the wire transfer.

May 2008



Procedure Name: <i>Atmospheric Pipe Inspection</i>	Procedure No.: 2-5020	
	Date: 7/06/2004	Page 1 of 6

Introduction

This procedure describes the inspection of gas pressure piping where the coating is exposed to the atmosphere.

Inspection of gas pressure piping exposed to the atmosphere is required to detect corrosion damage and coating deterioration.

This SOP contains the following sections:

- General
- Coating Inspection
- Corrosion Evaluation
- Coating Evaluation and Recommended Actions

Frequency

Onshore Pipelines

Inspect all onshore gas pressure piping exposed to the atmosphere at least once every 3 calendar years, not to exceed 39 months. (Example: piping inspected 2/20/2004 must be inspected on or before to 5/20/2007.)

Offshore Pipelines

Inspect all offshore gas pressure piping exposed to the atmosphere at least once each calendar year, but not to exceed fifteen (15) months, to ensure compliance with regulatory and Company requirements.

Responsibility

Area Management.

General

ACTION	RESPONSE/REMARKS
INSPECT for deterioration of pipe and coating condition of gas pressure piping at (but not limited to) the locations listed below.	
INSPECT all gas pressure piping exposed to the atmosphere, including flanges, valves, fuel supply lines, etc.	<i>Give special attention to pipe underneath tie-down straps, pipe resting on support piers, pipe under insulation, through-wall piping in buildings, and pipe at the interface with the ground. This includes piping within valve canopies / vaults.</i>

Compressor Stations



Panhandle
Eastern PIPE LINE COMPANY
Trunkline GAS COMPANY

Standard Operating Procedures
Volume 2 - CORROSION

Procedure Name: <i>Atmospheric Pipe Inspection</i>	Procedure No.: 2-5020	
	Date: 7/06/2004	Page 2 of 6

	ACTION	RESPONSE/REMARKS
<i>Measuring and Regulating (M&R) Stations</i>	INSPECT all exposed, Company-owned piping, both inside and out of the meter house.	<i>Give special attention to pipe underneath tie-down straps, pipe resting on support piers, pipe under insulation, through-wall piping in buildings, and pipe at the interface with the ground.</i>
<i>Mainline Valves</i>	INSPECT all pipe exposed to the atmosphere, including blowdowns, operator valves, volume bottles, and operator piping.	
<i>Pipeline Spans</i>	INSPECT all portions of pipeline spans.	<i>Carefully examine concealed areas under straps or supports and the air soil interface</i>
<i>Offshore Piping</i>	INSPECT all Company-owned offshore facilities above the water line. Inspections must include a detailed examination of all areas exposed to wave action (splash zone).	<i>Carefully examine concealed areas under straps or supports, through-deck piping, riser clamps, and pipe under insulation. Splash zone inspections may require a boat to conduct a thorough inspection of platform supports / pipeline risers.</i>
<i>Wellhead Equipment</i>	INSPECT all portions of wellhead equipment on storage or producing wells.	
<i>Farm and Irrigation Taps</i>	INSPECT all portions of aboveground piping that belong to the Company.	



Procedure Name: <i>Atmospheric Pipe Inspection</i>	Procedure No.: 2-5020	
	Date: 7/06/2004	Page 3 of 6

	ACTION	RESPONSE/REMARKS
<i>Emergency Pipe</i>	INSPECT emergency pipe to DETERMINE condition of coating system.	<i>Emergency Pipe exposed to sunlight must be coated / topcoated with a UV resistance coating system. Thinned latex paint is an acceptable topcoat for white washing coatings that are not UV resistant.</i>
<i>Coating Inspection</i>	VISUALLY INSPECT the coating (paint).	<i>Corrosion Control Technician is responsible.</i>
	RATE the coating's condition: <ul style="list-style-type: none"> • Good (0-5%): Coating intact with no visible deterioration or damage. • Fair (6-20%): Coating essentially intact, but with some visible deterioration. • Poor (21-99%): Extensive visible deterioration of coating. • Bare (100%): No coating present. 	
	DETERMINE the presence of corrosion.	<i>Indications of corrosion must be evaluated by a Corrosion Technician.</i>
<i>Corrosion Evaluation and Repair</i>	IF corrosion is found, EVALUATE the remaining strength of the metal loss defect. REPAIR the metal loss defect if the Case 1 Safe Operating Pressure is less than MAOP.	<i>Refer to SOP 2-4020, Evaluation of Remaining Strength of Pipe with Metal Loss and SOP 1-3010, Pipeline Repair.</i>



Panhandle
Eastern PIPE LINE COMPANY
Trunkline GAS COMPANY

Standard Operating Procedures
 Volume 2 - CORROSION

Procedure Name: Atmospheric Pipe Inspection	Procedure No.: 2-5020	
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Reporting



Coating Evaluation and
 Recommended Action

Reporting



ACTION	RESPONSE/REMARKS
COMPLETE a Pipe Inspection Report for each corrosion evaluation.	
DETERMINE whether the service life of the existing coating system can be extended through spot repair or maintenance painting.	<i>Spot repairs should be made at minor defects to prevent continued coating degradation and corrosion. Refer to Section 2.6 of the Above Grade Coating Manual for guidelines on Maintenance Coating systems.</i>
DETERMINE whether the existing coating system will provide adequate protection to limit corrosion activity to a uniform light surface oxide before the next Compliance Inspection.	<i>With the exception of offshore risers and soil-air interface areas, the presence of uniform light surface oxides should not affect the safe operation of the pipeline system.</i>
DEVELOP recommendations for coating rehabilitation using the guidelines listed in Attachment A.	
REVIEW inspection results and recommendations with Area Supervision and Division Corrosion Specialist.	<i>Technician should plan coating inspections to ensure that any required work can be considered during the next budget cycle.</i>
DOCUMENT inspection results and recommendations for coating repairs, maintenance painting, or coating removal / replacement in the Atmospheric Corrosion Database. RECORD the date for the scheduled repairs, and when the repairs are completed.	



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ATTACHMENT 1
CLASSIFICATION OF COATING INSPECTION

CASE	DESCRIPTION	ACTION
Case 1	Coating system intact. No indications of corrosion. Experience in Area indicates that coating will perform adequately until next inspection period.	<i>No action required.</i>
Case 2	Coating defects have or will likely result in rust streaking and growth of the coating defect. No indications of detrimental corrosion. Experience in Area indicates that coating will perform adequately until next inspection period.	<i>No action required; however, spot repairs will extend the service life of the coating system. Spot repairs include UV topcoats for soil-air interface coatings.</i>
Case 3	Degradation of topcoat, but majority of primer and/or intermediate coat intact. No indications of pitting. Economic analysis indicates maintenance coating is cost effective. Experience in Area indicates that remaining coating / surface oxide will prevent pitting until next inspection period.	<i>No action required; however, maintenance painting is a cost effective means to extend the service life of the coating system.</i>
Case 4	Degradation of topcoat, but majority of primer and/or intermediate coat intact. No indications of pitting. Economic analysis indicates maintenance coating is not cost effective. Experience in Area indicates that remaining coating and / or surface oxide will prevent pitting until next inspection period.	<i>No action required. Existing coating system must be removed prior to recoating.</i>
Case 5	Economic analysis indicates that maintenance coating / spot repairs are not practical or cost effective. Indications of corrosion, regardless of type or severity. Experience in Area indicates that corrosion is likely before next inspection period.	<i>Coating rehabilitation required. Remove and replace existing coating system. Existing coating system must be removed prior to recoating.</i>



Panhandle
Eastern PIPE LINE COMPANY
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Case 6	Degradation of topcoat, but majority of primer and/or intermediate coat intact. Indications of pitting. Economic analysis indicates maintenance coating is cost effective.	<i>Coating rehabilitation required. Remove and replace existing coating system in areas where coating degradation is severe. Apply maintenance coating over intact portions of existing coating.</i>
Case 7	Economic analysis indicates that maintenance coating is not practical or cost effective. Indications of pitting.	<i>Coating rehabilitation required. Remove and replace existing coating system.</i>