

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, DC 20590**

	)	
<b>In the Matter of</b>	)	
	)	
<b>Kinder Morgan Liquids Terminals, LLC,</b>	)	<b>CPF No. 1-2011-5009</b>
	)	
<b>Respondent.</b>	)	
	)	

**CONSENT AGREEMENT AND ORDER**

On November 15-19, 2010, pursuant to Chapter 601 of 49 United States Code, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site inspection of the pipeline facilities of Kinder Morgan Liquids Terminals, LLC (KMLT or Respondent), at its terminal facilities in Carteret, New Jersey (Terminal).

As a result of this inspection, the Director, Eastern Region, OPS (Director), issued to Respondent, by letter dated October 12, 2011, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice), a copy of which is attached hereto as Appendix A. In accordance with 49 C.F.R. § 190.207, the Notice proposed (1) finding that Respondent had committed various violations of 49 C.F.R. Part 195, (2) assessing a total civil penalty of \$89,800 for five of the alleged violations, and (3) ordering Respondent to take certain measures to correct the alleged violations.

KMLT responded to the Notice by letter dated November 11, 2011, and requested a hearing, which was held on August 7, 2012. KMLT has proposed, as part of this proceeding and a related enforcement action, CPF No. 1-2011-5008, to resolve both matters via administrative consent agreements.

Having agreed that settlement of this proceeding will avoid further administrative proceedings or litigation, pursuant to 49 C.F.R. Part 190, without adjudication of any issue of fact or law, and upon consent and agreement of Respondent and PHMSA (Parties), the Parties agree as follows:

**I. General Provisions.**

1. For purposes of this Consent Agreement and Order (Agreement), Respondent acknowledges that as operator of the Terminal, KMLT and its pipeline system located at the Terminal are subject to the jurisdiction of the Federal pipeline safety laws, 49 U.S.C. 60101, *et seq.*, and the regulations and

administrative orders issued thereunder.<sup>1</sup> As used in this Agreement, the terms “pipeline system” and “pipeline facility” shall be defined as in 49 C.F.R. Part § 195.2. Respondent acknowledges that it received proper notice of PHMSA’s action in this proceeding and that the Notice states claims upon which relief may be granted pursuant to 49 U.S.C. 60101, *et seq.*, and the regulations and orders issued thereunder.

2. Respondent consents to the issuance of this Agreement, and hereby waives any further procedural requirements with respect to its issuance. Respondent waives all rights to contest the adequacy of notice or the validity of the Agreement, including all rights to administrative or judicial hearings or appeals.

3. This Agreement shall apply to and be binding upon PHMSA and upon Respondent, its officers, directors, and employees, and its successors, assigns, or other entities or persons otherwise bound by law. Respondent agrees to provide a copy of this Agreement and any incorporated work plans and schedules to all of KMLT’s officers, employees, and agents whose duties might reasonably include compliance with this Agreement.

4. For all transfers of ownership or operating responsibility of Respondent’s pipeline system at the Terminal, KMLT shall provide a copy of this Agreement to the prospective transferee at least 60 business days prior to such transfer and simultaneously provide written notice of the prospective transfer to the Director and the Associate Administrator for Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

5. This Agreement constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Agreement, and the Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Agreement and its appendices.

6. Nothing in this Agreement affects or relieves KMLT of its responsibility to comply with all applicable requirements of the Federal pipeline safety laws, 49 U.S.C. § 60101, *et seq.*, and the regulations and orders issued thereunder. Nothing in this Agreement alters PHMSA’s right of access, entry, inspection, and information-gathering or its authority to bring any enforcement action against Respondent pursuant to the Federal pipeline safety laws, the regulations and orders issued thereunder, or any other provision of Federal or State law.

7. This Agreement does not waive or modify any Federal, State, or local laws or regulations that are applicable to KMLT or its pipeline systems. This Agreement is not a permit, or a modification of any permit, under any Federal, State, or local laws or regulations. Respondent remains responsible for achieving and maintaining compliance with all applicable Federal, State, and local laws, regulations and permits.

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<sup>1</sup> For a map showing the jurisdictional components of Respondent’s system at the Terminal, see drawings entitled, “Kinder Morgan Carteret, NJ, Liquids Terminal, East & West Tank Field P&ID’s,” prepared by STV Incorporated, consisting of 105 sheets, dated May 6, 2013 (on file with PHMSA Eastern Region).

8. This Agreement does not create rights in, or grant any cause of action to, any third party not party to this Agreement. The U.S. Department of Transportation (DOT) is not liable for any injuries or damages to persons or property arising from acts or omissions of Respondent or its officers, employees, or agents carrying out the work required by this Agreement. KMLT agrees to hold harmless DOT, its officers, employees, agents, and representatives from any and all causes of action arising from any acts or omissions of Respondent or its contractors in carrying out the work required by this Agreement.

9. Except as otherwise provided in this Paragraph, the Parties agree that the facts are as alleged in each item of the Notice and that each item may be considered by PHMSA to be a prior offense in any future PHMSA enforcement action against KMLT. This Agreement, however, does not constitute a finding of violation of any Federal law or regulation and may not be used in any civil proceeding of any kind as evidence or proof of any fact, fault or liability, or as evidence of the violation of any law, rule, regulation or requirement, except in a proceeding to enforce the provisions of this Agreement or in future PHMSA enforcement actions.

As for Item 5 of the Notice, PHMSA has reviewed the evidence and determined that the records submitted by KMLT in response to the alleged violation of 49 C.F.R. § 195.412(b) do, in fact, satisfy the inspection requirements of that regulation. Therefore, this Item is hereby withdrawn.

10. Respondent agrees to complete the corrective actions specified in Section II (Work to be Performed) of this Agreement and to pay the civil penalties specified in Section VI (Civil Penalties).

## **II. Work to be Performed.**

11. KMLT agrees to perform all the corrective actions set forth in the proposed Compliance Order, as included in the Notice and incorporated herein as part of Appendix A, except for Item 2 (see Paragraph 12 below), Item 5 (see paragraph 13 below), and Item 7 (see Paragraph 14 below).

12. With respect to Item 2 of the proposed Compliance Order, Respondent agrees to perform all the corrective actions set forth in Appendix B to this Agreement, entitled "Carteret Terminal MOP Substantiation" (Carteret Project), which is hereby incorporated into this Agreement. The Carteret Project may be revised to incorporate new information obtained during the evaluations and remedial activities performed as a part of the Carteret Project. Respondent must submit any proposed Carteret Project revisions to the Director for approval. The Director may approve proposed revisions in whole or in part, or may direct KMLT to revise or modify the Carteret Project as necessary, as set forth in Section III (Review and Approval Process) and Section IV (Dispute Resolution) below.

13. As discussed above, Item 5 of the Notice has been withdrawn. Accordingly, there is no work to be performed for this Item.

14. With respect to Item 7 of the proposed Compliance Order, Respondent agrees to complete all corrective actions within 270 days of the Effective Date of this Agreement, as defined below.

15. The Director may grant an extension of time for completion of any of the work to be performed under this Section II upon Respondent's timely, written request that demonstrates both good cause for an extension and provides sufficient detail to enable the Director to evaluate Respondent's request.

### **III. Review and Approval Process.**

16. With respect to any submission under Section II (Work to be Performed) of this Agreement that requires the approval of the Director, the Director may: (a) approve, in whole or in part, the submission; (b) disapprove the submission on specified conditions; (c) disapprove, in whole or in part, the submission; or (d) any combination of the foregoing. In the event of approval in whole, in part, or upon conditions, KMLT will proceed to take all actions required by the submission as modified by the Director, subject to Respondent's right to invoke the procedures in Section IV (Dispute Resolution) with respect to any conditions identified by the Director. In the event that the Director does not approve all or any portion of the submission, the Director will provide KMLT with a written notice of the deficiencies. Respondent will correct all deficiencies within the time specified by the Director and resubmit it for acceptance. If Respondent fails to correct the specified deficiencies, the Director may invoke the dispute resolution process provided in Section IV below.

### **IV. Dispute Resolution.**

17. The Director and Respondent will informally attempt to resolve any disputes arising under this Agreement. If KMLT and the Director are unable to informally resolve the dispute within 15 business days, Respondent may request in writing, within 10 business days, a written determination resolving the dispute by the Associate Administrator for Pipeline Safety, PHMSA. Along with its request, Respondent will provide the Associate Administrator with all information KMLT believes is relevant to the dispute. If the request is submitted as provided herein, the Associate Administrator will issue a written determination that shall be final. The existence of a dispute and PHMSA's consideration of matters placed in dispute shall not excuse, toll, or suspend any term or timeframe for completion of any work to be performed under this Agreement during the pendency of the dispute resolution process, except as agreed by the Regional Director or the Associate Administrator in writing.

### **V. Enforcement of Agreement and Order.**

18. This Agreement, including all plans and schedules incorporated by reference, is subject to all enforcement authorities available to PHMSA under 49 U.S.C. § 60101, *et seq.*, and 49 C.F.R. Part 190, including administrative civil penalties under 49 U.S.C. § 60122, of up to \$200,000 per violation for each day the violation continues and referral of the case to the Attorney General for judicial enforcement, if PHMSA determines that Respondent is not complying with the terms of this Agreement in accordance with determinations made by the Director, or if appealed, in accordance with decisions of the Associate Administrator. The Carteret Project and all other work plans and associated schedules developed under Section II shall be automatically incorporated into this Agreement and are enforceable in the same manner.

## **VI. Civil Penalties.**

19. As discussed above, Item 5 of the Notice has been withdrawn. Therefore, the proposed civil penalty of \$26,700 for such Item is also withdrawn.

20. Within 15 days from the execution of this Agreement, Respondent agrees to pay to the United States a total civil penalty in the amount of Sixty-three Thousand One-Hundred Dollars (\$63,100.00), said amount being assessed by PHMSA for the following alleged violations set forth in the Notice:

- a. \$30,500, as proposed for Item 3 in the Notice, for the alleged violation of 49 C.F.R. § 195.402(a);
- b. \$10,500, as proposed for Item 4 in the Notice, for the alleged violation of 49 C.F.R. § 195.266;
- c. \$10,500, as proposed for Item 6 in the Notice, for the alleged violation of 49 C.F.R. § 195.555; and
- d. \$11,600, as proposed for Item 7 in the Notice, for alleged violation of 49 C.F.R. § 195.585(a)(1).

21. Payment of the \$63,100 must be made within 15 days of the Effective Date, as defined below. Federal regulations (49 C.F.R. § 89.21(b)(3)) require such payment to be made by wire transfer through the Federal Reserve Communications System (Fedwire), to the account of the "U.S. Treasury." 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, Oklahoma 73125. The telephone number of the Division is (405) 954-8893.

22. Failure to pay the penalty set forth above within 15 days of the Effective Date will result in the 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 of a Notice of Late Payment. 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.

## **VII. Miscellaneous.**

23. PHMSA will have the right to inspect the records and facilities of KMLT or any contractor or agent thereof upon reasonable notice, to confirm that the Carteret Project and other compliance terms of this Agreement are being undertaken in conformity with the terms of this Agreement.

24. Except as otherwise provided herein, this Agreement may be modified only by the mutual agreement of the Parties and set forth in writing and signed by both Parties.

25. Each undersigned representative of the Parties certifies that he is fully authorized by the party represented to enter into the terms and conditions hereof and to execute and legally bind that party to it.

**VIII. Effective Date and Term.**

26. The “Effective Date” as used herein is the date on which this Agreement is signed by both KMLT and PHMSA. Unless specified to the contrary, all deadlines for actions required by the Agreement run from the Effective Date of the Agreement.

**IX. Termination.**

27. This Agreement will terminate upon payment of the full penalty amount set forth in Section VI (Civil Penalties) and the completion of all terms set forth in Section II (Work to Be Performed), as determined by the Director. Respondent may request, and PHMSA will provide, written confirmation when this Agreement is terminated. Nothing in this Agreement prevents Respondent from completing any of the obligations earlier than the deadlines provided for herein.

The Parties hereby agree to all conditions and terms of this Agreement:

For PHMSA:



Jeffrey D. Wiese  
Associate Administrator for  
Pipeline Safety, PHMSA

For Kinder Morgan Liquids Terminals, LLC:



Carlos Munguia  
Vice-President  
Kinder Morgan Liquids Terminals, LLC



U.S. Department  
Of Transportation  
Pipeline and  
Hazardous Materials Safety Administration

820 Bear Tavern Road, Suite 103  
West Trenton, NJ 08628  
609.989.2171

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

**Express Overnight Mail**

October 12, 2011

Mr. David Vattimo  
Regional Vice President  
Kinder Morgan Liquid Terminals, LLC  
8500 West 68<sup>th</sup> Street  
Argo, IL 60501

**CPF 1-2011-5009**

Dear Mr. Vattimo:

On November 15-19, 2010, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected the facility of Kinder Morgan Liquid Terminal LLC (KM) in Carteret, New Jersey.

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 violations are:

- 1. §195.404 Maps and Records.**
  - (a) Each operator shall maintain current maps and records of its pipeline systems that include at least the following information;**

**(2) All crossings of public roads, railroads, rivers, buried utilities, and foreign pipelines.**

KM failed to maintain maps and records of the Carteret facility that included all crossings of public roads, railroads, rivers, buried utilities and foreign pipelines.

During the field review of Carteret Terminal, a PHMSA representative requested KM personnel to provide documentation of the location of each pipeline within the Carteret facility. KM did not have any maps, records or documentation depicting the crossings of any public roads, railroads, rivers, buried utilities, or foreign pipelines within the KM Carteret facility.

**2. §195.404 Maps and Records.**

**(a) Each operator shall maintain current maps and records of its pipeline systems that include at least the following information;**

**(3) The maximum operating pressure of each pipeline.**

KM failed to maintain maps and records of the Carteret facility that included the maximum operating pressure (MOP) of each pipeline.

During the field review of Carteret Terminal, a PHMSA representative requested KM personnel to provide documentation of the MOP of each pipeline at the Carteret facility. KM did not have any records or documentation demonstrating the established MOP of each pipeline at its Carteret facility.

**3. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.**

KM failed to follow its procedure, *T-O&M 406-Welding Inspection and Testing* dated 3/24/2009 Item 3 page 1, that states a “*qualified welding inspector must inspect each weld being made to ensure that the proper welding procedure was followed and the finished weld meets applicable standards and codes.*”

During the field review, a PHMSA representative observed ongoing construction work involving the pipe replacement of Tank 120 line from Dock 2 Header to

Tank 120, near the Pit 44 area. KM personnel indicated that construction commenced in August 2010 and that no qualified welding inspector was on-site or available to ensure that the finished weld met applicable standards and codes.

**4. §195.266 Construction records.**

**A complete record that shows the following must be maintained by the operator involved for the life of each pipeline facility:**

- (a) The total number of girth welds and the number nondestructively tested, including the number rejected and the disposition of each rejected weld.**
- (b) The amount, location, and cover of each size of pipe installed.**
- (c) The location of each crossing of another pipeline.**
- (d) The location of each buried utility crossing.**
- (e) The location of each overhead crossing.**
- (f) The location of each valve and corrosion test station.**

At the time of the inspection, KM did not produce any records or documentation concerning piping construction to Tank 100-4 and Tank 100-5 that was completed in August 2010. KM failed to maintain records as prescribed in §195.266 for this construction project.

**5. §195.412 Inspection of rights-of-way and crossings under navigable waters.**

- (b) Except for offshore pipelines, each operator shall, at intervals not exceeding 5 years, inspect each crossing under a navigable waterway to determine the condition of the crossing.**

KM failed to adequately inspect Line 1206 which runs under the Rahway River, a navigable waterway, to determine the condition of the crossing. The crossing was inspected in the year 2003 and in the year 2008; however, KM could not determine the depth of cover on the line at the time of the 2008 inspection due to an inoperable pipe locator transmitter. As of the date of the inspection, KM had not scheduled a subsequent inspection to determine the condition of the crossing, as required by § 195.412(b).

**6. §195.555 What are the qualifications for supervisors?**

**You must require and verify that supervisors maintain a thorough knowledge of that portion of the corrosion control procedures established under Sec. §195.402(c)(3) for which they are responsible for insuring compliance.**

KM failed to verify that the supervisor maintained thorough knowledge of that portion of the corrosion control procedure established under Sec. §195.402(c)(3) for which they are responsible.

An interview with KM's supervisor during the inspection of its corrosion control records demonstrated that KM's supervisor had no knowledge of its corrosion control procedures. KM's supervisor depended on a third party contractor to perform corrosion control inspections and then filed the records without ensuring compliance with 49 CFR Part 195 Subpart H. KM had no documentation that showed that the supervisor received formal or technical training commensurate with the supervisor's responsibilities. In addition, KM did not have another qualified supervisor interpret the corrosion control records.

7. **§195.585 What must I do to correct corroded pipe?**

**(a) General corrosion. If you find pipe so generally corroded that the remaining wall thickness is less than that required for the maximum operating pressure of the pipeline, you must replace the pipe. However, you need not replace the pipe if you--**  
**(1) Reduce the maximum operating pressure commensurate with the strength of the pipe needed for serviceability based on actual remaining wall thickness...**

During a review of its records, a PHMSA representative discovered that, according to an atmospheric corrosion survey performed in 2009, some pipelines had thickness data showing greater than 50% wall loss. KM had twenty-one (21) indications on its aboveground pipelines that measured above 50% wall loss. KM was unable to produce a remedial report indicating that it replaced these pipes associated with the twenty one (21) indications or reduced MOP commensurate with the strength of the pipe. Furthermore, KM could not calculate the remaining strength of the pipe segment based on actual remaining wall thickness because KM did not have any documentation or knowledge of the actual MOP of the pipelines.

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 violations and has recommended that you be preliminarily assessed a civil penalty of **\$89,800** as follows:

<u>Item number</u>	<u>PENALTY</u>
3	<b>\$30,500</b>
4	<b>\$10,500</b>
5	<b>\$26,700</b>
6	<b>\$10,500</b>
7	<b>\$11,600</b>

Proposed Compliance Order

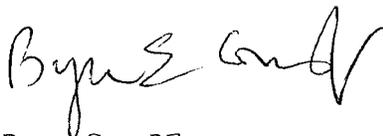
With respect to items numbers 1-7 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to KM. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

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.

Please address your correspondence to Byron Coy, PE, Director, PHMSA Eastern, 820 Bear Tavern Rd, Suite 103, Bear Tavern Rd, W. Trenton, NJ 08628. Please refer to **CPF 1-2011-5009** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Byron Coy, PE  
Director, Eastern Region  
Pipeline and Hazardous Materials Safety Administration

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

## PROPOSED COMPLIANCE ORDER

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

1. Regarding Item Number 1 of the Notice pertaining to §195.404(a)(2), KM must update set of alignment maps to illustrate all current crossings of public roads, railroads, rivers, buried utilities and foreign pipelines within 120 days of receipt of the Final Order.
2. Regarding Item Number 2 of the Notice pertaining to §195.404 (a)(3), KM must submit adequate related historical records of the maximum operating pressure (MOP) of all its jurisdictional pipeline system in or affiliated with the Carteret facility within the timeframe prescribed in Item 8 of this Compliance Order. If, KM is unable to produce those records, KM must complete a pressure test pursuant to 49 CFR, Part 195, Subpart E to establish the MOP of its pipeline facility, or reduce the presumed maximum operating pressure to 80 percent of the operating pressure to which each pipeline segment was subjected for 4 or more continuous hours that can be demonstrated by the methods prescribed in §195.406(a)(5) within 150 days of receipt of the Final Order.
3. Regarding Item Number 3 of the Notice pertaining to §195.402(c)(3), KM must conduct a non-destructive test (NDT) on all welds associated with Tank 120 near Pit 44 in accordance with §195.234. Then, KM must commission a third-party that is qualified by the American Society of Non-Destructive Testing to examine the results, analyze the integrity of the welds and prepare a final report. KM must have a final report from this third-party analysis within 180 days of receipt of the Final Order.
4. Regarding Item Number 4 of the Notice pertaining to §195.266, KM must have completed records of piping construction to Tank 100-4 and Tank 100-5 in accordance with §195.266 within 90 days of receipt of the Final Order.
5. Regarding Item Number 5 of the Notice pertaining to §195.412(b), KM must conduct a thorough inspection of the crossing under the Rahway River. KM must have the results of the inspection within 90 days of receipt of the Final Order.
6. Regarding Item Number 6 of the Notice pertaining to §195.555, KM must have documentation demonstrating that the supervisor, who is responsible for corrosion control, has undergone training sufficient to acquire adequate knowledge pertaining to 49 CFR Part 195 Subpart H and KM's corrosion control procedures within 180 days of receipt of the Final Order.
7. Regarding Item Number 7 of the Notice pertaining to §195.585(a)(1), KM must evaluate the locations stated in Item Number 7 of this Notice and perform any remedial work required by §195.585. KM must have documentation of all the results of the evaluation and remedial work within 120 days of receipt of the Final Order.

8. KM may submit available historical record(s) regarding any of the above-mentioned items to the Director within 30 days of receipt of the Final Order. Once any of those record(s) are deemed to be adequate and in compliance with Pipeline Safety Regulations, Title 49 Code of Federal Regulation according to the Director, the item will be considered satisfied without the need to perform any additional work. If KM fails to provide any historical records within 30 days of receipt of the Final Order or those submitted record(s) are deemed inadequate, KM must comply with the requirements set forth in the individual items of the Compliance Order.
9. Regarding Items 1-7, KM must make any and all records, including procedures, available for review by the Director, or designate, upon request.
10. All records and procedures submittals must be compiled in a final summary report demonstrating the work performed for all the above-mentioned items. The final summary report must be submitted to the Director within 30 days of the completion of the last action performed by KM that is set forth in this Compliance Order.
11. It is requested (not mandated) that KM maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses; and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.

## **APPENDIX A**

**APPENDIX B**



Kinder Morgan Liquids Terminals, LLC

TERMINALS PROCEDURE

Substantiation of Terminal Piping Maximum  
Operating Pressure (MOP)

Carteret Terminal, Carteret, NJ

## **1.0 APPLICABILITY**

Refined Products/Natural Gasoline.

## **2.0 PURPOSE AND SCOPE**

This document provides Kinder Morgan Liquids Terminals, LLC (KMLT) North East Region procedures for establishing and documenting MOP for each DOT jurisdictional segment of pipe at its terminal facility located in Carteret, New Jersey (the Carteret Project or Project), as required pursuant to the Consent Agreement and Order between PHMSA and KMLT regarding CPF No. 1-2011-5009, dated

The Project includes 100 piping segments, and will involve pressure testing each jurisdictional segment in order to substantiate MOP in accordance with the pipeline safety regulations, found at 49 C.F.R. Part 195. The Carteret Terminal operates under an established MOP of 285 psi, based on maximum pressure rating of installed flanges. The following procedures and schedule is designed to substantiate the established MOP in accordance with 49 C.F.R. Part 195. This procedure follows existing KMLT O&M Procedure T-O&M 1600 (Strength and Leak Testing) (attached), as applicable.

## **3.0 TESTING PROCEDURES**

KMLT will implement the following methods for executing the Project:

### **3.1 Identify line segments and internal design pressure**

3.1.1 Using Piping and Instrumentation Diagrams (P&ID's), break down piping systems or segment details, number of flanges, appurtenances, measurements, etc.

3.1.2 Identify line segments for manageable testing.

3.1.3 Research and document to ensure that all pipe components of the line segment are capable of the target test pressures. (Refer to test pressures in 3.3.1)

### **3.2 Testing Preparation**

3.2.1 Develop an air elimination procedure to mitigate risk of air being injected into tanks and potentially causing floating roof damage and/or sinking of roofs.

3.2.2 Assemble and issue specifications for piping, valves, blinds, fittings, flanges, gaskets, studs, and nuts, etc.

3.2.3 Secure and/or have on stand-by replacements for piping, valves, fittings,

gauges, gaskets, etc.

- 3.2.3 Evacuate line segments to appropriate storage tank.
- 3.2.4 Drain line segments of any residual products to vacuum trucks and into storage tanks.
- 3.2.5 Remove and plug all appurtenances on line segments, except for 1-2 low point drains.
- 3.2.6 Install slip blinds for segments to be tested. Employ Lock-Out Tag-Out.
- 3.2.7 Review contractor pressure test equipment calibration and verify equipment records.

### 3.3 Conduct pressure tests<sup>2</sup>

- 3.3.1 Conduct pressure tests at 1.25 x 285 psi or 357 psi for four hours for above-ground pipe and an additional four hours at 1.10 x 285 psi or 314 psi for underground pipe. Pressure test must be conducted in accordance with §195.304.
- 3.3.2 Use water as a test medium for each line segment.
- 3.3.3 Commence pressure test by slowly ramping up pressure in increments until the test pressure is met. Four hours at 357 psi and an additional four hours at 314 psi, depending on line segment. (Refer to calculations in 3.3.1)
- 3.3.4 Record pressure, ambient temperature and pipe temperature and monitor pressure changes.
- 3.3.5 Inspect line segment for leakage for the duration of the test.
- 3.3.6. If a leak and/or failure occur, then that line segment must be retested.
- 3.3.7 Evaluate chart recorder and check that the test meets 49 C.F.R. Part 195 requirements.

### 3.4 Completion

- 3.4.1 Upon completion, begin system drain of test medium to vacuum trucks.

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<sup>2</sup> For a map showing the jurisdictional components of Respondent's system, see drawings entitled, "Kinder Morgan Carteret, NJ, Liquids Terminal, East & West Tank Field P&ID's," prepared by STV Incorporated, consisting of 105 sheets, dated May 6, 2013 (on file with PHMSA Eastern Region).

- 3.4.2 Place test medium in Baker style tanks for reuse in other pipe segments.
- 3.4.3 De-water with nitrogen to remove as much water as possible from low point drains.
- 3.4.4 Re-install appurtenances on pipe segments, utilizing new Flexitallic gaskets and new nuts and bolts.
- 3.4.5 Remove Lock-Out Tag-Out controls and isolation blinds and returns segment back to service.

#### **4.0 TESTING SAFETY**

- 4.1 Testing procedures should be in place to protect all employees, contractors, and members of the public, including “essential personnel” who are or might be in proximity to the facilities undergoing testing.
- 4.2 Maintaining a safe distance for everyone, or providing adequate barriers or other protections, if necessary to have personnel in the vicinity of the facilities being tested.
- 4.3 Everyone on site during the test must be informed of the procedures and a pre-start up safety review must be conducted.
- 4.4 The testing team should also be asked to survey the site to identify and remove, as appropriate, any loose material that might present a hazard in the event of failure.
- 4.5 Do not use swell plugs or plumber’s plugs/night caps for performing pressure tests.

#### **5.0 PROJECT SCHEDULE**

KMLT has developed a schedule to complete all jurisdictional segment testing on the Carteret Terminal by May 31, 2015. This schedule will best accommodate KMLT’s efforts to conduct the work safely and with minimal fuel-supply disruption to local markets. The following table reflects KMLT’s projected schedule for segment testing, which will resume in the spring of 2013. Designation and sequencing of specific segments for testing during a given season will be at KMLT’s discretion and guided by risk assessment principles. As outlined further below, KMLT will provide periodic progress reports to PHMSA so that the agency may track implementation of the Carteret Project. In the first progress report, KMLT will also include documentation of the segments tested in 2012 for PHMSA’s review.

## Proposed Carteret Project Execution Plan

<b>Total Segments</b>	<b>2012 Segments</b>	<b>2013 Segments</b>	<b>2014 Segments</b>	<b>2015 Segments</b>
<b>100</b>	<b>Total: 3</b>	<b>Total: 45</b>	<b>Total: 43</b>	<b>Total: 9</b>

### 6.0 TRAINING

Personnel performing the Project must meet the requirements of the KM Operator Qualification program.

### 7.0 DOCUMENTATION

Specific records identified in this section are to be retained in accordance with T-O&M Procedure 1404, Maps and Records and 49 C.F.R. Part 195.310.

#### 7.1 Test Reporting

Prepare a test report for every pressure test using T-OM1600-01, Pressure Test Report. This report will be a permanent record and may be used to satisfy regulatory agencies. Retain the test report for as long as the facility is in use. Be sure that the data is complete, self-explanatory, and in accordance with 49 C.F.R. 195.310. Attach the following to the test report:

- 7.1.1 Pressure recording chart signed by the person responsible for making the test.
- 7.1.2 Temperature recording chart signed by the person responsible for making the test.
- 7.1.3 Dead weight gauges and pressure recorder calibration certification.
- 7.1.4 Where elevation difference in the section under test exceeds 100 feet, a profile of the pipeline that shows the elevation and test sites over the entire length of the test section.

7.1.5 Complete all sections of T-OM1600-01, Pressure Test Report. If a part of the form is not applicable, insert N/A (not applicable) so every section is completed. A company representative must sign all reports.

7.1.6 The “Pressure Test Report” shall contain the following information:

- Kinder Morgan’s Business Unit’s name.
- The name of the person responsible for making the test (Test Supervisor).
- The name of the test company used, if any (Test Contractor).
- The date and time of the test.
- The minimum test pressure.
- The test medium.
- A description of the facility tested and the test apparatus.
- A description of any pressure discontinuities, including test failures and temperature deviations that appear on the pressure recording charts.

## **7.2 Additional Testing Reports**

In addition to the strength test report, complete the following if applicable when testing pipeline facilities:

7.2.1 T-OM200-02, Pipeline Inspection/Repair Report distribute as stated on form.

7.2.2 Retain Survey Notes: Include all pressure test report numbers in the survey notes. Forward completed notes to the project management group.

## **7.3 PHMSA Reporting**

PHMSA has requested that KMLT provide progress reports and other opportunities for information-sharing during implementation of the Project.

7.3.1 Commencing no more than 90 days after the Effective Date of the Agreement and continuing every 90 days thereafter, until the Carteret Project Completion Report, as described below, has been filed and accepted by PHMSA, KMLT will submit quarterly progress reports to PHMSA, describing all work performed during the preceding quarter and the safety impacts and implications of the Carteret Project to date.

The quarterly reports will include a segment completion inventory spreadsheet, attached as Attachment A.

7.3.2 Within 90 days after completion of the Carteret Project. KMLT will file a Carteret Project Completion Report with the Director. Said report will contain, at minimum, the following information:

- A detailed description of the work performed, as implemented;
- The total itemized costs of the work performed; and
- Certification that the works has been implemented pursuant to the provisions of the Project plan.
- Verification that all jurisdictional assets have been pressure tested.

7.3.3 All reports, including the Carteret Project Completion Report, shall be submitted to the Director. As the person responsible for monitoring Respondent's compliance with the terms of this Agreement, the Director may request any additional documentation, studies, or reports reasonably necessary to verify compliance with the terms of the Project plan.

\* \* \* \*

**ATTACHMENT A**

**QUARTERLY PROGRESS  
REPORT**

*[DATE]*

**Kinder Morgan Liquids Terminals,  
LLC**

**Terminal Maximum Operating Pressure (MOP) Substantiation Project**

**CARTERET TERMINAL, CARTERET, NJ**

Segment Name	P&ID Numbers	Test Date	Pass / Fail	Test Pressure (psi)	Test Medium

**ATTACHMENT B**

**T-O&M 1600 (STRENGTH AND LEAK TESTING) |**

**TERMINALS O&M PROCEDURE**

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**1. Applicability**

- Liquid (PHMSA Regulated) Terminals
- Liquid (Non-PHMSA Regulated) Terminals
- Bulk Terminals

**2. Scope**

Pipelines, and each pipeline segment that has been relocated, replaced, or otherwise changed, must be pressure tested without leakage. This procedure contains information about strength and leak testing with air, product, water or inert gas. Testing is required whenever pipe, fabricated units or new breakout tanks built to API standards are installed.

Before performing the test, obtain written approval for any deviation from this procedure from an authorized representative of engineering.

**SQE Statement**

This procedure follows Best Management Practices (BMPs), and is one of the steps necessary in establishing and implementing Kinder Morgan Terminal’s Safety, Quality, and Environmental (SQE) programs and culture.

SQE program elements were developed through aggregating best management practices and lessons learned across our organization. The elements of SQE are intended to help develop a culture where all Teammates perform their daily tasks in a manner that upholds our Core Principles, while running safe, environmentally compliant, quality focused, efficient operations. Kinder Morgan’s Core Principles are as follows:

**Do The Right Thing Every Day**

- 1) Safety Will Not Be Compromised
- 2) Environmentally Compliant and Responsible Operator
- 3) Ethics and Integrity
- 4) Commitment to Employees and Resources
- 5) Customer Service and Fiscal Responsibility
- 6) Quality Focus

**TERMINALS O&M PROCEDURE**

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- 1) Safety Will Not Be Compromised
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- 3) Ethics and Integrity
- 4) Commitment to Employees and Resources
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**3. Core Information and Requirements****3.1. Exceptions to Pressure Testing**

Except for pipelines converted under 49 CFR 195.5 (refer to T-O&M Procedure 271, Conversion to Service), the following pipelines may be operated without pressure testing under this procedure:

- 3.1.1. Any hazardous liquid pipeline whose maximum operating pressure is established under 49 CFR 195.406(a)(5) that is-
  - An interstate pipeline constructed before January 8, 1971;
  - An interstate offshore gathering line constructed before August 1, 1977;
  - An intrastate pipeline constructed before October 21, 1985; or
  - A low-stress pipeline constructed before August 11, 1994, that transports HVL.
- 3.1.2. Any carbon dioxide pipeline constructed before July 12, 1991, that-
  - Has its maximum operating pressure established under 49 CFR 195.406(a)(5); or
  - Is located in a rural area as part of a production field distribution system.
- 3.1.3. Any low-stress pipeline constructed before August 11, 1994, that does not transport HVL.
- 3.1.4. Those portions of older hazardous liquid and carbon dioxide pipelines for which KM has elected the risk-based alternative under 49 CFR 195.303 and which are not required to be tested based on the risk-based criteria.

**3.2. Pressure Testing Deadlines**

Except for pipelines that transport HVL onshore, low-stress pipelines, and pipelines covered under 49 CFR 195.303, the following compliance deadlines apply to pipelines under **Sections 3.1.1** (1<sup>st</sup> three bullets) and **3.1.2** (1<sup>st</sup> bullet) of this section that have not been pressure tested under this subpart:

- 3.2.1. Before December 7, 1998, for each pipeline KM shall -
  - 3.2.1.1. Plan and schedule testing according to this paragraph; or
  - 3.2.1.2. Establish the pipelines maximum operating pressure under 49 CFR 195.406(a)(5).
- 3.2.2. For pipelines scheduled for testing, KM shall -
  - 3.2.2.1. Before December 7, 2000, pressure test-
    - 3.2.2.1.1. Each pipeline identified by name, symbol, or otherwise that existing records show contains more than 50 percent

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**TERMINALS O&M PROCEDURE**

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by mileage of electric resistance welded pipe manufactured before 1970; and

3.2.2.1.2. At least 50 percent of the mileage of all other pipelines; and

3.2.2.2. Before December 7, 2003, pressure test the remainder of the pipeline mileage.

**3.3. Pressure Testing of Components**

3.3.1. Each pressure test under 49 CFR 195.302 must test all pipe and attached fittings, including components, unless otherwise permitted by Section 3.3.2.

3.3.2. A component, other than pipe, that is the only item being replaced or added to the pipeline system need not be hydrostatically tested under Section 3.3.1 if the manufacturer certifies that either-

3.3.2.1. The component was hydrostatically tested at the factory; or

3.3.2.2. The component was manufactured under a quality control system that ensures each component is at least equal in strength to a prototype that was hydrostatically tested at the factory

**4. Testing of Pipelines - Excluding DOT Breakout Tanks.****4.1. State or Local Regulatory requirements for Pressure Testing**

4.1.1. KMEP Business Units must comply with specific state rules and regulations in addition to federal Integrity Management Program (IMP) standards. A pressure test that meets or exceeds the requirements of 49 CFR 195, Subpart E generally will comply with Federal IMP standards. If State or local requirements are less stringent, the Federal IMP standards will apply to both intrastate and interstate pipelines.

4.1.2. States typically inspect and enforce regulations for intrastate pipeline segments. Every attempt should be made to select assessment methods that will simultaneously satisfy both State and Federal requirements.

4.1.3. States known to have specific integrity assessment requirements include California, Florida, Louisiana, and Texas. Other states with detailed requirements may also exist. It is the responsibility of Manager, Pipeline Integrity and the Business Unit Integrity Management Teams to be familiar with Federal, State, and local requirements related to integrity assessment testing and to select assessment method(s) that satisfy all governing requirements.

**4.2. Testing Safety****Do The Right Thing Every Day**

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**TERMINALS O&M PROCEDURE**

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Testing procedures should be in place that protects all employees, contractors, and members of the public, including "essential personnel" who might need to be in proximity to the facilities being tested. This can be accomplished by maintaining a safe distance for everyone, or providing adequate barriers or other protections if it is necessary to have personnel in the vicinity of the facilities being tested. Everyone on site during the test must be informed of the procedures and a pre-start up safety review must be conducted. The testing team should also be asked to survey the site to identify and remove, as appropriate, any loose material that might present a hazard in the event of failure.

Do not use swell plugs or plumber's plugs / night caps for performing pressure tests.

**4.2.1. Testing Media**

Water will be the required test medium. Any exception to this will require approval from the appropriate vice president of engineering. The vice president will insure that there is no alternative, a site specific procedure is created and reviewed, and that no person is in harm's way when piping is greater than 50% SMYS. This internal approval is required even with the following regulatory allowed exception:

4.2.1.1. Except for offshore pipelines, liquid petroleum that does not vaporize rapidly may be used as the test medium if-

- (a) The entire pipeline under test is outside of cities and other populated areas;
- (b) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure which produces a hoop stress of 50 percent of specified minimum yield strength;
- (c) The test section is kept under surveillance by regular patrols during the test; and,
- (d) Continuous communication is maintained along entire test section.

4.2.1.2. Carbon dioxide pipelines may use inert gas or carbon dioxide as the test medium if-

- (a) The entire pipeline section under test is outside of cities and other populated areas;
- (b) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure that produces a hoop stress of 50 percent of specified minimum yield strength;
- (c) The maximum hoop stress during the test does not exceed 80 percent of specified minimum yield strength;
- (d) Continuous communication is maintained along entire test section; and,
- (e) The pipe involved is new pipe having a longitudinal joint factor of 1.00.

4.2.1.3. Air or inert gas may be used as the test medium in low-stress pipelines.

**4.2.2. Investigation and Repairs – External Leakage****Do The Right Thing Every Day**

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**TERMINALS O&M PROCEDURE**

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If there is an external leakage failure of the pipe not associated with a flange gasket or other type of non welded fitting, the Project Manager shall identify any and all specimens to be collected for further metallurgical investigation. In order to facilitate an adequate analysis of any leaks or failures, the Project Manager will contact the Corporate IMP group or Company Metallurgist to set up a metallurgical protocol, pick a lab to perform analysis, and determine sample handling requirements.

Use the information gathered at the failure site and from the metallurgical examination to determine if additional sites should be excavated and inspected. Schedule additional inspections and repairs as appropriate.

After removal of failure point, Project Manager will initiate repairs to pipeline necessary due to external leakage following governing Business Unit procedures. Repeat the pressure test to achieve successful results upon completion of pipeline repairs.

Refer to **T-O&M Procedure 213, Leaks, Pipe and Weld Defects (Evaluation and Repair)** for pipeline facilities repair.

**4.2.3. Before the Test**

- Assemble a job-specific testing procedure
- Verify that test pressure is above 50% of the chart recorder range and deadweight calibrated range.
- Obtain a copy of the contractor's deadweight and chart recorder calibration certification before conducting the test.
- Inform local agencies as required by regulations.

**4.2.4. Conducting the Post-Installation Test**

- Maintain communications at all mainline valves and major road crossings during the test.
- The test pressure for each pressure test conducted must be maintained throughout the part of the system being tested for at least 4 continuous hours at a pressure equal to 125 percent, or more, of the maximum operating pressure (MOP) and, in the case of a pipeline that is not visually inspected for leakage during the test, for at least an additional 4 continuous hours at a pressure equal to 110 percent, or more, of the maximum operating pressure.
- Adjust test pressures for elevation by considering grade profiles and deadweight elevation. Do not allow the pressure at the lowest elevation to exceed the maximum allowable test pressure or allow the pressure at the highest elevation to drop below the minimum allowable test pressure. Eliminate air from the test section. Allow an adequate period of time for temperature stabilization.
- For below ground piping utilize a pair of temperature probes having matching calibration and placed as follows. One probe is to be buried in soil at pipe depth at least 10 feet from the pipe in a location representative of general ground temperature and the other probe is to be placed in contact with the buried pipe near the same location. For above ground piping utilize a single temperature probe and place it such that it is protected from the environment.
- Open all valves in a test section fully. Do not test through equipment or against a closed valve without prior approval from engineering.

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- When the test section is at a pressure of 85% SMYS, hold the test pressure static for a minimum of thirty minutes.
- When the test pressure (adjusted for elevation) is reached, shut in the test section.
- Maintain the pressure between the maximum and minimum allowable test pressures. Record deadweight pressures every thirty minutes and before and after each re-pressuring or bleed-down period. Record the volume of water added to or bled from the test section.
- Temperature recordings shall be started prior to the start of the field operation when hydrostatic testing. Identification information and signatures shall be the same as for pressure charts. Temperature readings of the pipe and the test medium may be logged manually at intervals sufficient to record temperature changes, but not to exceed one (1) hour, using **T-OM1600-01, Pressure Test Report**.
- Once the test is completed, dewater the pipeline.

**4.2.5. Hydrostatic Test for Mitigating Stress Corrosion Cracking (SCC)**

The spike test is an assessment method for SCC conducted during the initial hour of an eight-hour hydrostatic test. The highest possible spike test pressure is desired (up to 110% SMYS), provided the pipe is not permanently bulged. In a high consequence area (HCA), a one-hour spike test by itself cannot be used as an assessment method for SCC unless the Office of Pipeline Safety (OPS) is notified 180 days in advance (see the **Pipeline Integrity Management Program**).

When conducting a hydrostatic test for mitigating SCC as prescribed in **T-O&M Procedure 917, Stress Corrosion Cracking**, the following special eight-hour test requirements apply:

- For the first hour, keep the minimum test pressure at least 100% SMYS of the lowest strength pipe and the maximum test pressure at less than or equal to 110% SMYS of the lowest strength pipe (adjusted for elevation)
- Do not re-pressure during the one-hour spike test. Pressure can be bled off during this hour so the maximum pressure is not exceeded.
- Maintain the minimum test pressure at a minimum of 90% SMYS of the lowest strength pipe and the maximum test pressure at less than or equal to 100% SMYS of the lowest strength pipe for seven hours. See further details in this procedure.

**4.2.6. Hydrostatic Water Permitting, Handling/Disposing and Sampling**

When conducting a hydrostatic test, consider:

- The suitability of fill water
- Compliance with all fill and discharge permit requirements
- Handling and disposing of any pre-pig fluids.

Contact the Environmental, Health and Safety Department (EHS) well in advance of any hydrotesting. EHS will help secure the necessary uptake and discharge permits and determine if any water testing and erosion control is required. Requirements vary by state.

The project manager is responsible for submitting the hydrostatic discharge water lab analyses to the appropriate state agency. EHS may be available to assist.

**4.2.7. Pre-Installation Test****Do The Right Thing Every Day**

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**TERMINALS O&M PROCEDURE**

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For pipe that is completely visible (fabricated units, pipe associated with tie-in, short pipe sections), a four-hour pressure test held at a minimum of 125 percent of MOP will be sufficient.

**4.2.8. Testing Stock Pipe (Emergency Pipe)**

Test stock pipe per the preceding procedure for a minimum of four hours. Send test records and pipe mill test reports to engineering and the storage site location. If tested pipe is transferred to another location, send a copy of the test and mill report with the pipe.

**5. Testing of New DOT Breakout Tanks Built to API Specifications.**

Testing of new DOT Breakout Tanks that were built to API standards will be tested in accordance with the applicable API Standard as follows:

- For aboveground breakout tanks built to API Specification 12F and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12F.
- For aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.18 of API Standard 620.
- For aboveground breakout tanks built to API Standard 650 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.3 of API Standard 650.
- For aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C that are returned to service after October 2, 2000, the necessity for the hydrostatic testing of repair, alteration, and reconstruction is covered in section 10.3 of API Standard 653.
- For aboveground breakout tanks built to API Standard 2510 and first placed in service after October 2, 2000, pressure testing must be in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 or 2.

**6. Training**

Personnel performing strength and leak testing must meet the requirements of the KM Operator Qualification program.

**7. Documentation**

Specific records identified in this section are to be retained in accordance with T-O&M Procedure 1404, Maps and Records.

**7.1. Test Reporting**

Prepare a test report for every pressure test using T-OM1600-01, Pressure Test Report. This report will be a permanent record and may be used to satisfy regulatory agencies.

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**TERMINALS O&M PROCEDURE**

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Retain the test report as long as the facility is in use. Be sure that the data is complete and self-explanatory. Attach the following to the test report:

- Pressure recording chart signed by the person responsible for making the test
- Temperature recording chart signed by the person responsible for making the test
- Dead weight gauges and pressure recorder calibration certification
- Where elevation difference in the section under test exceed 100 feet, a profile of the pipeline that shows the elevation and test sites over the entire length of the test section
- Complete all sections of **T-OM1600-01, Pressure Test Report**. If a part of the form is not applicable, insert N/A (not applicable) so every section is completed. A company representative must sign all reports.
- The "Pressure Test Report" shall contain the following information.
  - Kinder Morgan's Business Unit's name.
  - The name of the person responsible for making the test (Test Supervisor).
  - The name of the test company used, if any (Test Contractor).
  - The date and time of the test.
  - The minimum test pressure
  - The test medium
  - A description of the facility tested and the test apparatus.
  - A description of any pressure discontinuities, including test failures and temperature deviations, that appear on the pressure recording charts

**7.2. Additional Testing Reports**

In addition to the strength test report, complete the following if applicable when testing pipeline facilities:

- **T-OM200-02, Pipeline Inspection/Repair Report** - distribute as stated on form.
- **Rechain Survey Notes:** Include all pressure test report numbers in the survey notes. Forward completed notes to the project management group.

**7.3. Data for IMP Program**

Upon completion of a hydro test, test date, test pressure, test fluid, chart recorder station number and MOP of test shall be forwarded to the Manager, Risk Engineering for CAP update. Incorporate assessment data and repair events in the KMEP integrity management risk model.

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**8. References**

- 49 CFR Part 195.303, .304, .305, .306, .307, .308, .310
- API 2510, Design and Construction of LPG Installations, ASME Boiler & Pressure Vessel Code, Section VIII, Division 1, Rules for Construction of Pressure Vessels
- ASME Boiler & Pressure Vessel Code, Section VIII, Division 2, Alternate Rules, Rules for Construction of Pressure Vessels
- **T-O&M Procedure 208, Operating Pressure Upgrading**
- **T-O&M Procedure 213, Leaks, Pipe and Weld Defects (Evaluation and Repair)**
- **T-O&M Procedure 271, Conversion to Service**
- **T-O&M Procedure 403, Pipe Wall Thickness Survey**
- **T-O&M Procedure 917, Stress Corrosion Cracking**
- **T-O&M Procedures 1404, Maps and Records**
- **T-OM200-02, Pipeline Inspection/Repair Report**
- **T-OM1600-01, Pressure Test Report**
- **Pipeline Integrity Management Program**

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