



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

SENT TO COMPLIANCE REGISTRY

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12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 6, 2009

Mr. Michael McCann
Vice President of Pipeline and Terminals
Tesoro Refining and Marketing Company
300 Concord Plaza Drive
San Antonio, TX 78216-6999

CPF 5-2009-0002

Dear Mr. McCann:

On September 9-11, 2008, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected Tesoro Refining and Marketing Company's (TRMC) procedures for Operations and Maintenance Procedural Manuals in Wilmington, California.

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. **§192.225 Welding procedures.**

(a) **Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see §192.7) or section IX of the ASME Boiler and Pressure Vessel Code "Welding and Brazing Qualifications" (incorporated by reference, see §192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).**

(b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

Tesoro Refining and Marketing Company has no welding procedures. If TRMC has a separate welding manual, and if that manual addresses the welding procedures, then it should be included or referenced in its O&M manuals. The welding procedures need to specify the section and the edition of API 1104 under which it is qualified.

2. §192.231 Protection from weather.

The welding operation must be protected from weather conditions that would impair the quality of the completed weld.

Tesoro Refining and Marketing Company's welding procedures do not specify how it will protect welding operations from weather conditions that could negatively impact the weld quality. If TRMC has a separate welding manual, and if that manual addresses weld protection from weather, then it should be included in its O&M manuals.

3. §192.233 Miter joints.

(a) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 30 percent or more of SMYS may not deflect the pipe more than 3°.

(b) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of less than 30 percent, but more than 10 percent of SMYS may not deflect the pipe more than 12 1/2° and must be a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint.

(c) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 10 percent or less of SMYS may not deflect the pipe more than 90°.

Tesoro Refining and Marketing Company does not preclude the use of miter joints, yet has no procedures for constructing miter joints. If TRMC has a separate welding manual, and if that manual allows miter joints, then the miter joints should be included or referenced in its O&M manuals.

4. §192.235 Preparation for welding.

Before beginning any welding, the welding surfaces must be clean and free of any material that may be detrimental to the weld, and the pipe or component must be aligned to provide the most favorable condition for depositing the root bead. This alignment must be preserved while the root bead is being deposited.

Tesoro Refining and Marketing Company has no procedures for surface preparation prior to welding. If TRMC has a separate welding manual, and if that manual addresses preparation for welding, then it should be included or referenced in its O&M manuals.

5. **§192.459 External corrosion control: Examination of buried pipeline when exposed.**

Whenever an operator has knowledge that any portion of a buried pipeline is exposed, the exposed portion must be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If external corrosion requiring remedial action under Secs. 192.483 through 192.489 is found, the operator shall investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.

Tesoro Refining and Marketing Company has no procedures to examine a buried pipeline when exposed for external corrosion and coating deterioration.

6. **§192.461 External corrosion control: Protective coating.**

(a) Each external protective coating, whether conductive or insulating, applied for the purpose of external corrosion control must-

(1) Be applied on a properly prepared surface;

(2) Have sufficient adhesion to the metal surface to effectively resist underfilm migration of moisture;

(3) Be sufficiently ductile to resist cracking;

(4) Have sufficient strength to resist damage due to handling and soil stress; and,

(5) Have properties compatible with any supplemental cathodic protection.

(b) Each external protective coating which is an electrically insulating type must also have low moisture absorption and high electrical resistance.

(c) Each external protective coating must be inspected just prior to lowering the pipe into the ditch and backfilling, and any damage detrimental to effective corrosion control must be repaired.

(d) Each external protective coating must be protected from damage resulting from adverse ditch conditions or damage from supporting blocks.

(e) If coated pipe is installed by boring, driving, or other similar method, precautions must be taken to minimize damage to the coating during installation.

Tesoro Refining and Marketing Company has no procedures for ensuring adequate protective coating for buried pipe. TRMC, in its O&M manuals, only states the pipeline should be coated. TRMC should specify procedures for coating specifications, type, installation, and protection.

7. **§192.467 External corrosion control: Electrical isolation.**

(a) Each buried or submerged pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.

- (b) One or more insulating devices must be installed where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.
- (c) Except for unprotected copper inserted in a ferrous pipe, each pipeline must be electrically isolated from metallic casings that are a part of the underground system. However, if isolation is not achieved because it is impractical, other measures must be taken to minimize corrosion of the pipeline inside the casing.
- (d) Inspection and electrical tests must be made to assure that electrical isolation is adequate.
- (e) An insulating device may not be installed in an area where a combustible atmosphere is anticipated unless precautions are taken to prevent arcing.
- (f) Where a pipeline is located in close proximity to electrical transmission tower footings, ground cables or counterpoise, or in other areas where fault currents or unusual risk of lightning may be anticipated, it must be provided with protection against damage due to fault currents or lightning, and protective measures must also be taken at insulating devices.

Tesoro Refining and Marketing Company has no procedures for electrical isolation. TRMC should have procedures isolating its buried pipeline from other underground structures unless they are all interconnected and cathodically protected as a single unit.

8. §192.471 External corrosion control: Test leads.

- (a) Each test lead wire must be connected to the pipeline so as to remain mechanically secure and electrically conductive.
- (b) Each test lead wire must be attached to the pipeline so as to minimize stress concentration on the pipe.
- (c) Each bared test lead wire and bared metallic area at point of connection to the pipeline must be coated with an electrical insulating material compatible with the pipe coating and the insulation on the wire.

Tesoro Refining and Marketing Company has no procedures for installing test leads. The procedures should make sure the test wire is mechanically secured, electrically conductive, has no stress concentration, and the point of connection to bare metal is coated.

9. §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.
- (c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, the operator need not protect from atmospheric corrosion any pipeline for which the operator demonstrates by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will-
 - (1) Only be a light surface oxide; or
 - (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

Tesoro Refining and Marketing Company has no procedures to ensure proper coating materials are used to protect their pipelines against atmospheric corrosion.

10. §192.481 Atmospheric corrosion control: Monitoring.

(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

<u>If the pipeline is located</u>	<u>Then the frequency of inspection is</u>
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months
Offshore	At least once each calendar year, but with intervals not exceeding 15 months

(b) During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

(c) If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by Sec. 192.479.

Tesoro Refining and Marketing Company has no procedures for monitoring atmospheric corrosion. TRMC, in its O&M manuals, requires the exposed pipes to be coated. TRMC need to inspect portion of the pipeline that is exposed at least once every 3 years not exceeding 39 months to ensure the applied coating is effective at protecting their pipeline against atmospheric corrosion.

11. §192.503 General requirements.

(a) No person may operate a new segment of pipeline, or return to service a segment of pipeline that has been relocated or replaced, until-

(1) It has been tested in accordance with this subpart and §192.619 to substantiate the maximum allowable operating pressure; and

(2) Each potentially hazardous leak has been located and eliminated.

(b) The test medium must be liquid, air, natural gas, or inert gas that is-

(1) Compatible with the material of which the pipeline is constructed;

(2) Relatively free of sedimentary materials; and,

(3) Except for natural gas, nonflammable.

(c) Except as provided in §192.505(a), if air, natural gas, or inert gas is used as the test medium, the following maximum hoop stress limitations apply:

Class location	Maximum hoop stress allowed as percentage of SMYS	
	Natural Gas	Air or inert gas
1	80	80
2	30	75
3	30	50
4	30	40

(d) Each joint used to tie in a test segment of pipeline is excepted from the specific test requirements of this subpart, but each non-welded joint must be leak tested at not less than its operating pressure.

Tesoro Refining and Marketing Company has no procedures for pressure testing its pipeline. TRMC has detailed hydrotest procedures in its O&M manuals (appendix B), however, these procedures are for hazardous liquid pipeline and not natural gas pipelines.

12. §192.605 Procedural manual for operations, maintenance, and emergencies.

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

(3) Making construction records, maps, and operating history available to appropriate operating personnel.

Tesoro Refining and Marketing Company has no procedure requiring that all construction records, maps, and operating history are available to its operating personnel.

13. §192.614 Damage prevention program.

(c) The damage prevention program required by paragraph (a) of this section must, at a minimum:

(6) Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities:

(ii) In the case of blasting, any inspection must include leakage surveys.

Tesoro Refining and Marketing Company has no procedures in its damage prevention program for conducting leakage surveys when there may be blasting close to its pipeline.

14. §192.615 Emergency plans.

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

(3) Prompt and effective response to a notice of each type of emergency, including the following:

(i) Gas detected inside or near a building.

(ii) Fire located near or directly involving a pipeline facility.

(iii) Explosion occurring near or directly involving a pipeline facility.

(iv) Natural disaster.

Tesoro Refining and Marketing Company has no procedures for responding to fire, explosion, and natural disasters that may affect the pipeline integrity or safe operation.

15. §192.617 Investigation of failures.

Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.

Tesoro Refining and Marketing Company has no procedures for investigating failures. TRMC needs to make certain that all contributing causes of a failure is investigated and the possibility of a recurrence minimized.

16. §192.627 Tapping pipelines under pressure.

Each tap made on a pipeline under pressure must be performed by a crew qualified to make hot taps.

Tesoro Refining and Marketing Company has no procedures for tapping pipelines under pressure.

17. §192.739 Pressure limiting and regulating stations: Inspection and testing.

(a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is—

(1) In good mechanical condition;

(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;

(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a);; and

(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

Tesoro Refining and Marketing Company did not have procedures for inspecting and testing its pressure limiting devices as required in §192.739(a).

Proposed Compliance Order

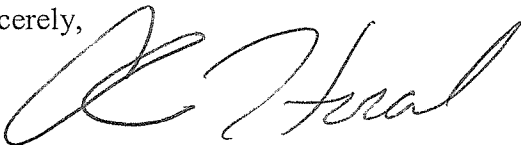
Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Tesoro Refining and Marketing Company. Please refer to the *Proposed Compliance Order* that is enclosed and made a part of this Notice.

Response to this Notice

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

In your correspondence on this matter, please refer to **CPF 5-2009-0002** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



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

cc: PHP-60 Compliance Registry
PHP-500 H. Monfared (#120751)

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 Tesoro Refining and Marketing Company a Compliance Order incorporating the following remedial requirements to ensure the compliance of Tesoro Refining and Marketing Company with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to welding procedures. TRMC must prepare welding procedures and ensure these procedures are qualified (by explicit reference) to the appropriate industry standard.
2. In regard to Item Number 2 of the Notice pertaining to protection from weather. TRMC must prepare procedures to protect welding operation from weather conditions that would impair the quality of the completed weld.
3. In regard to Item Number 3 of the Notice pertaining to miter joints. TRMC must prepare procedures to ensure that a miter joint on steel pipe do not deflect more than 3° , $12\frac{1}{2}^\circ$, and 90° if the hoop stress is $>30\%$, $<30\%$ but $>10\%$, and $<10\%$ of SMYS respectively. Alternatively they may preclude the use of miter welds.
4. In regard to Item Number 4 of the Notice pertaining to preparation for welding. TRMC must prepare procedures to ensure the welding surfaces are clean and free of any material that may be detrimental to the weld and the pipe or component are aligned before beginning any welding.
5. In regard to Item Number 5 of the Notice pertaining to examination of buried pipeline when exposed. TRMC must prepare procedures to ensure whenever any portion of a buried pipeline is exposed, the exposed portion are examined for evidence of external corrosion.
6. In regard to Item Number 6 of the Notice pertaining to protective coating. TRMC must prepare procedures to ensure each external protective coating, weather conductive or insulating, applied for the purpose of external corrosion control for buried pipe meets the requirement of §192.461.
7. In regard to Item Number 7 of the Notice pertaining to electrical isolation. TRMC must prepare procedures to ensure each buried pipeline is electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.
8. In regard to Item Number 8 of the Notice pertaining to test leads. TRMC must prepare procedures to ensure each test lead is connected, mechanically secured, electrically conductive, has minimal stress concentration on pipe, and coated at the point of connection to the pipeline.
9. In regard to Items Number 9 and 10 of the Notice pertaining to atmospheric corrosion. TRMC must prepare procedures to ensure a portion of pipeline that is exposed to

atmospheric corrosion is properly coated, and subsequently monitored, at least once every 3 calendar years not exceeding 39 months for evidence of atmospheric corrosion. Any atmospheric corrosion shall be evaluated and remediated, as necessary.

10. In regard to Item Number 11 of the Notice pertaining to test requirements. TRMC must prepare procedures to ensure a new segment of pipeline, or returns to service a segment that has been relocated or replaced, is tested in accordance with subpart J.
11. In regard to Item Number 12 of the Notice pertaining to procedural manual for operations, maintenance and emergencies. TRMC must prepare procedures to ensure construction records, maps, and operating history are readily available to appropriate operating personnel.
12. In regard to Item Number 13 of the Notice pertaining to damage prevention program. TRMC must prepare procedures to inspect pipelines that could be damaged by excavation activities such as blasting, and if blasting is used, the inspection must include a followed leakage survey.
13. In regard to Item Number 14 of the Notice pertaining to emergency plans. TRMC must prepare procedures to minimize the hazard resulting from gas pipeline emergencies such as fire near or directly involving a pipeline facility, explosions near or directly involving a pipeline facility, and natural disasters.
14. In regard to Item Number 15 of the Notice pertaining to investigation of failures. TRMC must prepare procedures for analyzing accidents and failures for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.
15. In regard to Item Number 16 of the Notice pertaining to tapping pipelines under pressure. TRMC must prepare procedures to ensure that if hot tapping is allowed on a pipeline under pressure, it is performed by a crew qualified to make hot taps.
16. In regard to Item Number 17 of the Notice pertaining to inspection and testing pressure limiting devices. TRMC must prepare procedures to ensure its pressure limiting stations, relief devices, and pressure regulating stations are inspected and tested once per calendar year, but not exceeding 15 months, to ensure they are in good mechanical condition, have adequate capacity, set to control or relieve at the correct pressure, and properly installed.
18. **Within 60 days of issuance of the Final Order, TRMC must complete the above items, and submit the required documentation and procedures to the Director, Western Region, Pipeline and Hazardous Material Safety Administration, 12300 West Dakota Avenue, Suite 110, Lakewood, Colorado 80228.**
19. Tesoro Refining and Marketing Company shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. Costs shall be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.