



U.S. Department  
of Transportation

**Pipeline and Hazardous Materials  
Safety Administration**

901 Locust Street, Suite 462  
Kansas City, Missouri 64106-2641

## NOTICE OF AMENDMENT

### **CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

September 19, 2016

Mr. Don J. Sorensen  
Senior Vice President, Logistics  
Tesoro Great Plains Midstream LLC  
19100 Ridgeway Parkway  
San Antonio, TX 78259

**CPF 3-2016-5008M**

Dear Mr. Sorensen:

On July 5-11 and 19-24, 2015, a representative of the Central Region office of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected the operation and maintenance procedures (O&M) and integrity management (IM) procedures for the Tesoro Great Plains Midstream LLC (Tesoro) assets at the office in Mandan, ND.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Tesoro's plans or procedures, as described below:

1. **§195.402 - Procedural manual for operations, maintenance, and emergencies.**
  - (c) **Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**
    - (3) **Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.**

**§195.403 Emergency Response Training.**

**(a) Each operator shall establish and conduct a continuing training program to instruct emergency response personnel to:**

**(1) Carry out the emergency procedures established under 195.402 that relate to their assignments;**

The procedures located in Section 2.2.3 contain the training requirements for the emergency plan. However, this is a restatement of the Part 195 code and is inadequate. Tesoro utilizes a Safety training matrix, which will be incorporated into the Safety Plan and was not referenced in the O&M. Additionally, procedures did not mention that table top drills will be used to meet the requirements of the emergency training as well which is what Tesoro personnel do.

**2. §195.402(c)(3) - See above**

**§195.403 Emergency Response Training.**

**(a) Each operator shall establish and conduct a continuing training program to instruct emergency response personnel to:**

**(4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage;**

The procedures located in Section 2.2.3; Number 7 are inadequate because they did not reflect what Tesoro does to satisfy the requirement. The procedures did not indicate the use of table top drills and did not reference the training matrix. The matrix indicates that this requirement will be addressed in the mandatory reading of the emergency plan and a face to face training session.

**3. §195.402(c)(3) - See above**

**§195.422 Pipeline Repairs. (b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.**

**§195.214 Welding procedures**

**(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.**

The procedure was inadequate because Procedure 6.6.1 did not reference the PCS binder 4 of 8 Section 3.05 which contains the detailed welding procedures and Procedure Qualifying

Records (PQR). It was also noted that in Section 7.2 of the O&M for welding a sleeve, the procedure may be incorrect. It indicates that a low-hydrogen 6010 electrode will be used. A 6010 electrode is cellulosic coated (not low hydrogen) and is typically not used for fillet welding a repair sleeve to the carrier pipe.

4. §195.402(c)(3) - See above

**§195.422 Pipeline Repairs. (b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.**

**195.226 Welding: Arc burns.**

**(a) Each arc burn must be repaired.**

The procedure for repair of an arc burn in section 6.6.4 was inadequate because there was not enough information about how to check and repair arc burns. Currently, the procedure is mostly a restatement of the Part 195 code.

5. §195.402(c)(3) - See above

**§195.422 Pipeline Repairs. (b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.**

**§195.234 Welds: Nondestructive testing. (b) Any nondestructive testing of welds must be performed-**

**(1) In accordance with a written set of procedures for nondestructive testing;**

The procedure in section 6.6 was inadequate because it did not reference the PCS Binder 4 of 8 Section 3.04 which specifies the company procedures and training required from the NDT contractor.

6. §195.402(c)(3) - See above

**§195.422 Pipeline Repairs. (b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.**

**§195.234 Welds: Nondestructive testing. (b) Any nondestructive testing of welds must be performed-**

**(2) With personnel that have been trained in the established procedures and in the use of the equipment employed in the testing.**

The procedure was inadequate because it did not reference PCS Binder 4 of 8 Section 3.04 - Paragraph 3.1 – which requires all contractors to be ASNT certified.

7. §195.402(c)(3) - See above

**§195.424 Pipe movement.**

**(a) No operator may move any line pipe, unless the pressure in the line section involved is reduced to not more than 50 percent of the maximum operating pressure.**

The procedure for pipe movement in Section 2.18.2 was inadequate because it was a restatement of the regulations. The procedure did not indicate that a more detailed procedure will be developed prior to performing a line lowering project.

8. §195.402(c)(3) - See above

**§195.428 Overpressure safety devices and overfill protection systems**

**(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.**

The procedure was inadequate because it did not detail in Section 2.11.4 - Pressure Control, the actual procedures for inspecting the ESD valves, the high pressure shut downs at Watford City Receipt, and the thermal or manifold reliefs. If procedures to inspect these devices are not included in the O&M, then Tesoro should reference those procedures that are described elsewhere.

9. §195.402(c)(3) - See above

**§195.428 Overpressure safety devices and overfill protection systems**

**(d) After October 2, 2000, the requirements of paragraphs (a) and (b) of this section for inspection and testing of pressure control equipment apply to the inspection and testing of overfill protection systems.**

The procedures in section 2.19.10.4 were inadequate because they did not address inspection and testing of over-fill protection devices on the breakout tanks.

10. §195.402(c)(3) - See above

**§195.432 Inspection of in-service breakout tanks.**

**(b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel above-ground breakout tanks according to API Std 653 (except section 6.4.3, Alternative Internal Inspection Interval) (incorporated by reference, see §195.3). However, if structural conditions prevent access to the tank bottom, its integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3). The risk-based internal inspection procedures in API Std 653, section 6.4.3 cannot be used to determine the internal inspection interval.**

The procedure for breakout tanks located in Section 2.19.10.4 did not include procedures to do the external ultrasonic (UT) 5 year inspection or the out of service inspections.

11. §195.402(c)(3) - See above

**§195.440 Public awareness**

**(a) Each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (IBR, see § 195.3).**

**Section 9–Evaluation of API RP 1162 indicates:**

**The purpose of the evaluation of the public awareness program is to:**

- **assess whether the current program is effective in achieving the objectives for operator public awareness programs as defined in 5.1 of this RP,**
- **provide the operator with information to determine whether program changes may be warranted.**

**The program evaluation should:**

- **pre-test effectiveness of materials,**
- **assess program implementation,**
- **measure program effectiveness.**

The procedure for evaluating program effectiveness in the Public Awareness Plan in section 1.9.3 did not indicate who was going to conduct the effectiveness evaluation. The procedures are complete on what is evaluated, but discussion with Tesoro personnel found they utilize a third party to conduct the evaluation.

12. §195.402(c)(3) - See above

**§195.440 Public awareness**

**(g) The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area.**

Tesoro's procedure for determining the concentration of the non-English speaking population in the areas they traverse was inadequate because it did not describe how Tesoro determines the threshold of 10%. In Section 1.6 of the Public Awareness Plan, the procedure indicates that if the population of non-English speakers exceeds 10% of the entire population, then a second language should be published. However, the procedures did not provide guidance on how personnel can verify if the non-English speaking population exceeds the 10%.

**13. §195.402(c)(3) - See above**

**§195.442 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.**

The procedure for leak surveying the line after blasting was inadequate because it was just a restatement of the regulations. The procedure did not provide any detail for Tesoro personnel to ensure the integrity of their line during and after blasting has occurred.

**14. §195.402(c)(3) - See above**

**§195.452 Pipeline integrity management in high consequence areas.**

**(l) What records must an operator keep to demonstrate compliance?—**

**(1) An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At a minimum, an operator must maintain the following records for review during an inspection:**

**(i) A written integrity management program in accordance with paragraph (b) of this section.**

**(ii) Documents to support the decisions and analyses, including any modifications, justifications, deviations and determinations made, variances, and actions taken, to implement and evaluate each element of the integrity management program listed in paragraph (f) of this section.**

The Integrity Management (IM) Plan did not have procedures for any record keeping requirements.

**15. §195.402(c)(3) – See above**

**§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.**

The procedure for qualification of supervisors was inadequate because the procedure did not define clearly how Tesoro is going to meet this regulation. Section 2.2.3 indicates that supervisors in charge of cathodic protection (CP) need to have training included in Phase 1 – Levels 3, 4, and 5. However, there is no description of what Phase 1 – Level 3, 4 or 5 means. Additionally, Section 2.12.1 should reference 2.2.3.

**16. §195.402(c)(3) -See above**

**§195.567 Which pipelines must have test leads and what must I do to install and maintain the leads?**

**(b) Installation. You must install test leads as follows:**

- (1) Locate the leads at intervals frequent enough to obtain electrical measurements indicating the adequacy of cathodic protection.**
- (2) Provide enough looping or slack so backfilling will not unduly stress or break the lead and the lead will otherwise remain mechanically secure and electrically conductive.**
- (3) Prevent lead attachments from causing stress concentrations on pipe.**
- (4) For leads installed in conduits, suitably insulate the lead from the conduit.**
- (5) At the connection to the pipeline, coat each bared test lead wire and bared metallic area with an electrical insulating material compatible with the pipe coating and the insulation on the wire.**

The procedures in the O&M manual for this requirement were inadequate because in Section 2.12.1.9, the procedure did not reference Section 2.4 in the Corrosion Control standard operating procedure (SOP).

**17. §195.402(c)(3) - See above**

**§195.573 What must I do to monitor external corrosion control?**

**(a) Protected pipelines. You must do the following to determine whether cathodic protection required by this subpart complies with Sec. 195.571:**

**(1) Conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months. However, if tests at those intervals are impractical for separately protected short sections of bare or ineffectively coated pipelines, testing may be done at least once every 3 calendar years, but with intervals not exceeding 39 months.**

In Section 2.12.1.7, the procedure is inadequate because it does not reference the Corrosion Standard Operating Procedures (SOP). Additionally, the SOPs do not contain any step by step procedures as CP work is performed by contractors. The contractor that is doing the work may have procedures (as part of the OQ qualification process); however, Tesoro did not receive copies of those procedures for review and approval and/or reference them in the O&M.

**18. §195.402(c)(3) - See above**

**§195.573 What must I do to monitor external corrosion control?**

**c) Rectifiers and other devices. You must electrically check for proper performance each device in the first column at the frequency stated in the second column.**

<b>Device</b>	<b>Check frequency</b>
<b>Rectifier.....</b>	<b>At least six times each calendar year, but with intervals not exceeding 2 ½ months</b>
<b>Reverse current switch DiodeInterference bond whose failure would jeopardize structural protection</b>	
<b>Other interference bond .....</b>	<b>At least once each calendar year, but with intervals not exceeding 15 months.</b>

In Section 2.12.1.7, the procedure is inadequate because it does not contain any step by step procedures to check a rectifier.

**19. §195.402(c)(3) - See above**

**§195.573 What must I do to monitor external corrosion control?**

**d) Breakout tanks. You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API RP 651 (incorporated by reference, see § 195.3). However, this inspection is not required if you note in the corrosion control procedures established under §195.402(c)(3) why complying with all or certain operation and maintenance provisions of API RP 651 is not necessary for the safety of the tank.**

The procedures for monitoring CP on breakout tanks were inadequate because it needs more specificity. The procedure did not have guidance, such as where to take the readings.

**20. §195.402(c)(3) - See above**

**§195.583 What must I do to monitor atmospheric corrosion control?**

**(c) If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by Sec. 195.581.**

The procedures in Section 2.12.3 - Atmospheric Corrosion Control, were inadequate because the procedure needs more verbiage about remedial actions, such as when it should occur and what remedial actions may be taken.

**21. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**

**5) Analyzing pipeline accidents to determine their causes.**

The procedure in Section 4.12.2 – Accident Investigation was inadequate because it did not include a change of custody form for transportation of the failed specimen. The procedure also did not include the use of metallurgical testing protocols.

**22. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**

**(13) Periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.**

The procedure is located in Section 2.16 of the O&M but does not specify how often they are going to do this periodic review. The procedures did not have enough specificity on how Tesoro is going to do this review. Lastly, the procedure did not reference Form 33 as the document of record.

**23. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(d) Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;**

**(5) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found.**

Tesoro's procedures in section 3.12 did not contain enough specificity, such as how often the review is going to be done. Also, the procedure did not reference Form 34 as the document of record.

**24. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(e) Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs;**

**(1) Receiving, identifying, and classifying notices of events which need immediate response by the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action.**

Tesoro's procedures did not appear to be consistent within the O&M in regards to notification of appropriate personnel and emergency responders. The O&M contained these procedures in two locations: Section 4.5.1 of the O&M and section 4.10.2 in the standard emergency response section. However, they appeared to be inconsistent. Section 4.5.1 indicated that the Supervisor will contact the next level of management in Section 4A.15, and there is no reference to contacting emergency responders if needed. But in section 4.10.2 under the standard emergency response, the procedure indicates that the supervisor will call emergency responders.

**25. 195.402(e) - See above**

**(9) Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.**

The procedures in section 4.12.2 of the O&M manual did not indicate how this review was going to be documented. Also, the procedure did not reference Form 35 as the document of record.

**26. §195.402 Procedural manual for operations, maintenance, and emergencies.**

**(f) Safety-related condition reports. The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of §195.55.**

Tesoro's procedure for safety related condition reports was inadequate because the referenced form within the procedure used to document the safety related condition reports is missing the principle address requirement on the form.

**27. §195.452 Pipeline integrity management in high consequence areas.**

**(f) What are the elements of an integrity management program? An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program:**

**(3) An analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of this section)**

In Section 4.4, the procedures were inadequate because there was no guidance on the disposition of information reviewed and discussed during the annual meeting. Any information vetted through the annual review must be incorporated into the required §195.452 (g) information analysis (e.g. a risk model, or other processes used to analyze and integrate information). Additionally, the IM Plan did not include adequate procedures for evaluating pump stations and breakout tanks for the HCAs that could be affected in the event of a spill.

**28. §195.452(f) (See above)**

**(4) Criteria for remedial actions to address integrity issues raised by the assessment methods and information analysis (see paragraph (h) of this section);**

The review of the procedures for anomaly repair and temporary pressure reductions identified the following procedures as inadequate:

1) §195.452(h) requires operators to address anomalous conditions and remediate those that could reduce a pipeline's integrity; therefore, procedures are necessary to provide timely discovery of anomalous conditions through integrity assessments. The procedures were insufficient to describe how Tesoro validates inline inspection (ILI) tool performance. For example, in section 6 regarding confirmation digs, the procedure indicates that a confirmation dig "may" be done, and the procedures did not include comparisons of ILI

data with as-found data when performing confirmation and/or integrity digs on the pipeline.

2) Regarding repairs, Tesoro references the repair matrix from API 1160 for repair methods that are utilized for certain types of defects. However, the footnotes that go along with the repair matrix were not included and should be when following industry standards and practices.

3) The IM Plan indicates that non-destructive testing (NDT), such as radiography, must also be utilized to inspect for cracks or stress corrosion cracking, whenever a susceptible section of pipe is exposed. Magnetic particle inspection and/or ultrasonic techniques are more common practices used to identify and/or size crack-like anomalies, and the procedures did not include these as NDT methods where applicable.

4) In section 7.4 and 7.5, the procedure indicates that in the event that a pressure reduction is necessary, the amount of the reduction will be based on an ASME B31G calculation (ASME B31G "*Manual for Determining the Remaining Strength of Corroded Pipelines*"). However, there are anomalies types where ASME B31G would not be applicable; therefore, the procedure should describe the pressure reduction for those situations as well (e.g. a minimum 20% reduction in operating pressure for immediate repair conditions, etc.).

**29. §195.452(f) (See above)**

**(5) A continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of this section);**

The procedure in Section 6.0 - Integrity Assessments was inadequate because it did not indicate how Tesoro selects ILI assessment methods. Specifically, the plan did not indicate that a geometry tool would be utilized with an MFL tool in order to detect deformation anomalies as well as corrosion anomalies [see §195.452(j)(5)(i)] .

**30. §195.452(f) (See above)**

**(6) Identification of preventive and mitigative measures to protect the high consequence area (see paragraph (i) of this section);**

The procedure in Section 8 for preventive and mitigative (P&M) measures indicates that a risk assessment is used to determine what additional measures are needed. At the time of PHMSA's inspection, Tesoro was utilizing the existing normal O&M requirements as P&M measures, since the line was recently constructed. However, the procedure did not require an analysis to identify additional measures to enhance public safety or environmental protection [see §195.452(i)], including a decision basis for selecting and implementing certain P&M measures.

**31. §195.505 Qualification program.**

**Each operator shall have and follow a written qualification program. The program shall include provisions to:**

**(b) Ensure through evaluation that individuals performing covered tasks are qualified;**

Tesoro's Operator Qualification (OQ) Plan was inadequate because the procedures did not take into account what to do in acquisitions or mergers.

**32. §195.505 (See Above)**

**(h) After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities;**

Tesoro's OQ Plan was inadequate because it did not contain any procedures to provide training for the covered tasks.

**33. §195.505 (See Above)**

**(i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the Administrator or state agency has verified that it complies with this section.**

Tesoro's OQ Plan was inadequate because the procedures do not specify that any notification will be done when a significant change has occurred in the OQ plan.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. 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.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 90 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Tesoro Great Plains Midstream LLC maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Allan C. Beshore, Director, Central Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 3-2014-5008M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in blue ink that reads "Allan C. Beshore". The signature is written in a cursive style with a large initial "A".

Allan C. Beshore  
Director, Central Region, OPS  
Pipeline and Hazardous Materials Safety Administration

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