



**Phillips 66
Pipeline LLC**

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May 9, 2012

Chris Hoidal, Director Western Region
Pipeline Hazardous Materials Safety Administration
12300 West Dakota Ave, Suite 110
Lakewood, CO 80228

RE: CPF 5-2012-5002M

Dear Mr. Hoidal:

This letter is in response to your letter dated February 21, 2012 regarding the Notice of Amendment (NOA), received by ConocoPhillips Pipe Line Company (CPPL) on February 28, 2012 issued as a result of an audit that was performed on June 13-17, 2011 on CPPL's procedures for operations, maintenance, and emergency response. Subsequent to receiving this NOA, CPPL has been renamed as Phillips 66 Pipeline LLC (P66PL). On behalf of CPPL, P66PL's response to this NOA is set forth below.

By submitting this response, P66PL does not waive any right, privilege or objection that it may have in any separate or subsequent proceeding related in any way to the information provided in this response.

PHMSA Concerns:

Item. 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.

The Operations and Maintenance (O&M) manual is required to include written pipeline repair procedures that comply with §195.422. This section requires that each repair be made in a safe manner. At the time of the inspection, there was no procedure requiring a written Non-Destructive Testing procedure when welds are nondestructively tested as required by §195.234(c), when using x-ray or gamma rays for the inspection of pipeline repairs.

CPPL's Response:

CPPL has addressed the concerns mentioned above in MPR-6012, in section 6. Starting in 6.1.4 NDT Procedure Acceptance Criteria:

6.1.4.1 Written weld examination procedures shall be used to inspect piping welds and shall contain as a minimum, the following variables:

- a) Material type and thickness range;
- b) Isotope used or maximum X-ray voltage;
- c) Source to object distance;
- d) Distance from source side of object to film;
- e) Source size;
- f) Film brand and designation;
- g) Type and thickness of screens.

6.1.4.2 Demonstration of the density and penetrameter image requirements of the written procedure on production or technique radiographs shall be considered satisfactory evidence of compliance with that procedure.

6.1.4.3 The film shall be interpreted using Section 9 of API 1104, Welding of Pipelines and Related Facilities.

6.1.5 Fillet welds and butt welds that cannot be inspected with radiography
All welds that cannot be inspected with radiography will be non-destructively tested in accordance with CPPL-MPR-6010, Magnetic Particle and Dye Penetrant Inspection.

6.1.6 Critical Pipeline Welds in High Risk Areas

6.1.6.1 Critical pipeline welds are individual girth welds for high risk locations. High risk locations are defined as river crossings, flood plains below the maximum flood stage, and all below-grade piping installations with limited ability for maintenance such as road and railroad crossings.

6.1.6.2 All critical welds shall be 100% non-destructively examined using RT and UT.

6.1.6.3 All critical welds shall receive "In-Process" visual weld examination of the following as applicable:

- a) Joint preparation and cleanliness
- b) Preheating
- c) Fit-up, joint clearance and internal alignment prior to joining
- d) Variables specified by the joining procedure, including filler material, position and electrode
- e) Condition of the root pass after cleaning — external and, where accessible, internal — aided by liquid penetrant or magnetic particle examination when specified in the engineering design
- f) Slag removal and weld condition between passes
- g) Appearance of the finished joint

6.1.6.4 Inspection and acceptance criteria for both the RT and UT inspections shall be per API 1104, Welding of Pipelines and Related Facilities.

6.1.6.5 Exceptions to these stipulations shall be approved by the Pipeline Integrity Manager in writing.

The procedure changes mentioned above are highlighted as well in MPR-6012, attached hereto for your review.

PHMSA Concerns:

Item 2. §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.

At the time of the inspection, the ConocoPhillips procedures addressing perimeter security for facilities were ambiguous and confusing. Procedure CPPL MPR-2201 WD2 (Security and Signs) Rev. 2 –Effective Date: 2011-03-23, Section 6.1 did not state who is responsible for determining the type or perimeter security required at a given site, guidelines for determining security for various types of sites, and who is responsible for maintaining the level of security established as required by §195.436.

CPPL's Response:

CPPL has addressed the concerns mentioned above in MPR-2201, in section 6 under procedure. Starting in 6.1 Security:

Per 195.436, Pipeline operators are required to provide protection to prevent unauthorized entry. COP has developed security minimal measures as follows:

- a) Ensuring signs are posted to warn of no trespassing and no unauthorized access is permitted
- b) Fencing the facility including barb wire top guard where appropriate
- c) Locking gates or vales which permit direct outward flow of a container's contents as required by the facility SPCC as applicable
- d) Facility lighting commensurate with the operation and the type and location of the facility.

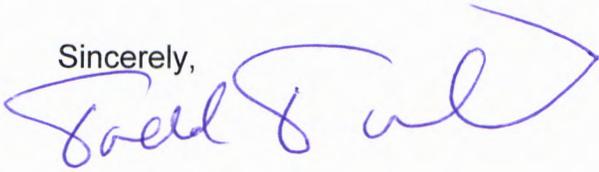
In addition COP reviews the facility based on the following:

- a) Risk factors such as location of the facility, occupancies surrounding the facility, business criticality, public exposure.
- b) Regulatory status – CFATS, MTSA, TSA Critical
- c) Industry Standards – API security guide
- d) Threat – Threat information as provided by local/state/federal law enforcement

The procedure changes mentioned above are highlighted as well in MPR-2201, attached hereto for your review.

Please let me know if you have any questions or comments regarding this matter.

Sincerely,



Todd Tullio
Manager, Regulatory Compliance

CC: B. Brown
D. Barney
V. Williams



ConocoPhillips Pipe Line Company

CPPL-MPR-6012

Procedure for Weld Radiographs

Rev. 3 – Effective Date: 2012-03-01

2012-03-01 SUPERSEDES CPPL-MPR-6012 Rev 2 Effective 2010-08-13

Document Summary

This procedure provides weld radiography requirements for carbon steel piping, tanks, and vessels. This procedure does not apply to the inspection of pipeline girth welds during line adjustment (see CPPL-MPR-4301).

Disclaimer

This standard is subject to revision at any time and will be reviewed according to the procedures of ConocoPhillips Pipe Line Company and reaffirmed, revised, or withdrawn. Uncontrolled unless viewed via Livelink. Suggestions for improvement of this standard are welcome. They should be sent to the Standardization Engineer.

Official Document Location: Livelink 34361800

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1. Scope, Purpose and Application

1.1 Scope

This maintenance procedure provides steps taken to conduct non-destructive testing (NDT) of welds by radiograph method. This document covers the following key areas:

- a) Personnel Requirements
- b) Safety
- c) Installation Procedures
- d) Testing Requirements

1.2 Purpose

The purpose of this procedure is to clearly state the requirements for weld radiographs which meet regulatory requirements as well as industry practices.

1.3 Application

This standard is intended for use any time that a weld is inspected by radiography. CPPL-MPR-6009, *Nondestructive Testing of Girth Welds*, contains additional information regarding documentation of radiographic testing.

2. References

The listed documents are not by reference part of this procedure. Reference is made only to the paragraph or section listed and not the entire document. The industry references as incorporated in these procedures are the latest version, revision, or edition except where DOT has incorporated an earlier version, revision, or edition as found in Subpart A of 49 CFR 195.3, Matter incorporated by Reference.

2.1 International, National and Industry References

49 CFR 192.225 Welding procedures
49 CFR 192.241 Inspection and test of welds
49 CFR 192.243 Nondestructive testing
49 CFR 195.228 Transportation of Hazardous Liquids by Pipeline - Welds and welding inspection: Standards of acceptability
49 CFR 195.234 Transportation of Hazardous Liquids by Pipeline - Welds: Nondestructive testing
API 510 Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair and Alteration
API STD 12C Specification for Welded Oil Storage Tanks
API STD 650 Welded Tanks for Oil Storage
API STD 653 Tank Inspection, Repair, Alteration, and Reconstruction
API STD 1104 Welding of Pipelines and Related Facilities
ASME B31.4 Pipeline Transportation Systems for Liquid Hydrocarbons and other Liquids



ASME Boiler and Pressure Vessel Code (BPVC) SECTION VIII, Division 1, Paragraph UW-51 Part UW Requirements for Pressure Vessels Fabricated by Welding

ASNT Recommended Practice SNT-TC-1A Personnel Qualification and Certification in Nondestructive Testing

2.2 Company References

CPPL-MPR-6009 Nondestructive Testing of Girth Welds

CPPL-MPR-6010, Magnetic Particle and Dye Penetrant Inspection

3. Definitions

See [CPPL Glossary and Terminology](#) in OneWiki.

4. Requirements

4.1 Operator Qualification (OQ)

4.1.1 Covered Tasks

Personnel shall be qualified to task W6012, *Weld radiograph Non-Destructive Testing (NDT)*, under current CPPL Operator Qualification guidelines to conduct this maintenance procedure. Personnel conducting this maintenance procedure shall possess, at a minimum, Level II Weld Radiograph certification per ANST Recommended Practice SNT-TC-1A, *Personnel Qualification and Certification in Nondestructive Testing*.

4.1.2 Abnormal Operating Conditions

4.1.2.1 The following are the abnormal operating conditions (AOCs) that could be encountered while performing this procedure: **Leak or unintended release of hydrocarbon from a pipeline component/facility**

4.1.2.2 The appropriate response to the AOC can be found in [Appendix E Abnormal Operating Conditions \(AOCs\)](#) of the CPPL Operator Qualification Plan.

4.2 Training

Training may include general welding procedures and knowledge, inspection device operation and calibration; and general non-destructive testing requirements.

4.2 Related Maintenance

4.2.1 [CPPL-MPR-6009](#), *Nondestructive Testing of Girth Welds*

4.2.2 [CPPL-MPR-6010](#), *Magnetic Particle and Dye Penetrant Inspection*.



5. Safety

5.1. The NDT Contractor is responsible for safety work practices and procedures as they relate to the radioactive exposure devices and the regulations that must be followed. These practices and procedures apply to company employees as well.

5.2 Film development involves chemicals and the NDT Contractor shall have Material Safety Data Sheets (MSDS) for material properties, precautionary measures, personal protective equipment and first aid measures.

6. Procedure

All welds shall be visually inspected. In addition, radiographic inspections shall be performed per the following procedures.

6.1 Pipe Circumferential Butt Girth Welds

6.1.1 The minimum percentage listed below in Table 1 applies to each welder each day unless specifically exempted.

PERCENT	SERVICE
10% (NOTE 1)	Steam under 600 psi. Fuel Gas. Non-regulated hydrocarbon piping ANSI Class 150 and below.
90% (NOTE 2)	Hydrocarbon piping ANSI 300 and above. Regulated piping. Pressurized vents and closed drain piping greater than 2 in. Piping between PD pump and pulsation dampener. Low temperature (below -20°F) hydrocarbon piping.
100%	Regulated piping consisting of: Old girth welds in used pipe. All tie-in welds.

Notes:

- 1) For small maintenance or repair jobs, the 10% minimum requirement does not have to be met on a daily basis. The 10% minimum should be targeted for each welder performing this work on a monthly basis.
- 2) 90% weld NDT is the minimum. 100% NDT should be performed on all welds if practical.

Table 1 Fillet and Butt Weld NDT Inspection Percentage Requirements

6.1.2 The minimum percentage listed in Table 1 above applies to each welder each day unless specifically exempted

6.1.3 NDT is not required on atmospheric vents and drains, including truck rack vapor lines and HVL vent stacks.



6.1.4 NDT Procedure/Acceptance Criteria

6.1.4.1 Written weld examination procedures shall be used to inspect piping welds and shall contain as a minimum, the following variables:

- a) Material type and thickness range;
- b) Isotope used or maximum X-ray voltage;
- c) Source to object distance;
- d) Distance from source side of object to film;
- e) Source size;
- f) Film brand and designation;
- g) Type and thickness of screens.

6.1.4.2 Demonstration of the density and penetrameter image requirements of the written procedure on production or technique radiographs shall be considered satisfactory evidence of compliance with that procedure.

6.1.4.3 The film shall be interpreted using Section 9 of API 1104, Welding of Pipelines and Related Facilities.

6.1.5 Fillet welds and butt welds that cannot be inspected with radiography

All welds that cannot be inspected with radiography will be non-destructively tested in accordance with CPPL-MPR-6010, *Magnetic Particle and Dye Penetrant Inspection*.

6.1.6 Critical Pipeline Welds in High Risk Areas

6.1.6.1 Critical pipeline welds are individual girth welds for high risk locations. High risk locations are defined as river crossings, flood plains below the maximum flood stage, and all below-grade piping installations with limited ability for maintenance such as road and railroad crossings.

6.1.6.2 All critical welds shall be 100% non-destructively examined using RT and UT.

6.1.6.3 All critical welds shall receive "In-Process" visual weld examination of the following as applicable:

- a) Joint preparation and cleanliness
- b) Preheating
- c) Fit-up, joint clearance and internal alignment prior to joining
- d) Variables specified by the joining procedure, including filler material, position and electrode
- e) Condition of the root pass after cleaning — external and, where accessible, internal — aided by liquid penetrant or magnetic particle examination when specified in the engineering design
- f) Slag removal and weld condition between passes
- g) Appearance of the finished joint



6.1.6.4 Inspection and acceptance criteria for both the RT and UT inspections shall be per API 1104, *Welding of Pipelines and Related Facilities*.

6.1.6.5 Exceptions to these stipulations shall be approved by the Pipeline Integrity Manager in writing.

6.2 Atmospheric Storage Tanks

This portion of this procedure shall apply to atmospheric storage tanks built to [API 650](#), *Welded Tanks for Oil Storage*, and [API 12C](#), *Specification for Welded Oil Storage Tanks*, constructed of carbon or low alloy steel. The tanks shall be aboveground and in non-refrigerated service. Atmospheric storage tanks shall be tanks with a maximum of 2.5 psig or less internal pressure. Repairs, tank penetrations, and shell replacements shall be radiographed per sections 6.2.2 and 6.2.3.

6.2.1 If defects are found, 100% radiography shall be performed on the repair weld. The minimum length of the radiograph shall be 6 inches.

6.2.2 New or Repaired Shell Joints

6.2.2.1 One radiograph for every vertical joint.

6.2.2.2 One radiograph shall be taken every 50-feet of horizontal weld joint excluding vertical and intersections of vertical and horizontal joints.

6.2.2.3 One radiograph shall be taken at each intersection of the vertical and horizontal weld joint on new or existing shell plate.

6.2.3 Replacement Shell Inset Plate and Door Sheet Welds

6.2.3.1 For circular replacement, one radiograph shall be taken.

6.2.3.2 For square or rectangular replacement, radiographs shall be taken at the following locations:

- a) One vertical joint
- b) One horizontal joint
- c) At each corner (including a curved radius)
- d) The junctions of existing and repair welds

6.2.3.3 If defects are found, 100% radiography shall be performed on the repaired weld.

6.2.4 Film Interpretation – Atmospheric Storage Tanks

6.2.4.1 Film shall be interpreted using Section 6 of [API 650](#), *Welded Tanks for Oil Storage*, which states: "Weld acceptance standards for API 650/653 shall be judged acceptable using the standard from ASME Section VIII, paragraph UW-51(b)." [Paragraph UW-51(b), *Requirements for Pressure Vessels Fabricated by Welding*, of Section VIII, Division 1 of the ASME *Boiler and Pressure Vessel Code*]

6.2.4.2 If the radiograph of an intersection of a new and old weld detects unacceptable welds in the old joint by current standards, the existing welds may be evaluated according to the original standard of construction, [API 650](#), *Welded Tanks for Oil Storage*, or API 12C, *Specification for Welded Oil Storage Tanks*.



6.3 Pressure Vessels

6.3.1 100% radiograph of repair weld(s) shall be required. If radiograph is not possible due to orientation of the weld, then perform magnetic particle inspection on the weld on both sides of the vessel shell.

6.3.2 Film Interpretation - Pressure Vessels

The film shall be interpreted per paragraph UW-51(b), *Requirements for Pressure Vessels Fabricated by Welding*, of Section VIII, Division 1 of the ASME *Boiler and Pressure Vessel Code*.

7. Documentation

7.1 Radiograph Records

7.1.1 Each film shall show the identification of the welder(s) making the weld. A weld map showing the location of the welds, weld number, radiograph number, welder identification and grading of each weld is an acceptable alternative.

7.1.2 Radiographs of repair work and records of radiographs of repair work shall be marked with the letter "R."

7.2 Retention Guidelines

7.2.1 The non-destructive testing record is to be maintained for the life of the facility at the Division Office or in the Construction Project files. See [CPPL-MPR-6009](#), *Nondestructive Testing of Girth Welds*.

7.2.2 Radiographic film is to be retained for one year.

(End of Document)



Revision/Approval Log

Revision/Approval Log				
Rev. No.	Date	Action	Revision by	Approval by
0	2005-01-21	Initial Issuance.	Keith Wooten	Keith Wooten
1	2006-01-27	Revised Section 3.2 to address welds that cannot be inspected by radiography. Revised Table 1 to apply to all NDT methods.	David M. Wilson	David M. Wilson
2	2010-08-13	Reformat front page, correct terminology	Randy Bowen	Joe Cox
3	2012-03-01	Reformatted document. Added Purpose, Application, Requirements, and Safety Sections. Added specific requirements for weld examination procedures in Section 6.1.5.1. Added Section 6.1.7 Critical Pipeline Welds in High Risk Areas. Deleted Section 6.4 and references dealing with Certification of Radiographic Companies as this is no longer done.	David M. Wilson	Mike S. Miller



ConocoPhillips Pipe Line Company

CPPL-MPR-2201-WD2

Security and Signs

Rev. 2 - Effective Date: 2012-04-24

2011-04-24 SUPERSEDES CPPL-MPR-2201 Rev. 1 Effective Date 2011-03-23

Document Summary

General Security and Signage procedures at ConocoPhillips facilities.

Disclaimer

This standard is subject to revision at any time and will be reviewed according to the procedures of ConocoPhillips Pipe Line Company and reaffirmed, revised, or withdrawn. Uncontrolled unless viewed via Livelink. Suggestions for improvement of this standard are welcome. They should be sent to the Standardization Engineer.

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1. Scope, Purpose and Application

1.1 Scope

This maintenance procedure provides guidance for Security and Signs at ConocoPhillips Pipe Line Company facilities. This document covers the following key areas.

- a) Allowable Security Types
- b) Signage

1.2 Purpose

The purpose of this procedure is to protect Company property from vandalism and unauthorized entry, and to ensure that signage provides adequate information to allow the appropriate calls to be made in the event of an emergency.

1.3 Application

This procedure applies to all ConocoPhillips Pipe Line Company facilities.

2. References

The listed documents are not by reference part of this procedure. Reference is made only to the paragraph or section listed and not the entire document.

2.1 International, National and Industry References

49 CFR 195.436 Transportation of Hazardous Liquids by Pipeline – Security of facilities

49 CFR 195.434 Transportation of Hazardous Liquids by Pipeline – Signs
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2.2 Company References

CPPL-MPR-8001 Right-of-Way Maintenance, for placement of line Markers

3. Definitions

See [CPPL Glossary and Terminology](#) in OneWiki.

4. Requirements

4.1 Operator Qualifications and Training

4.1.1 Personnel shall be qualified to task BT 2201, *Protect Pump Stations, Breakout tanks & Vessels and Valve Sites from Vandalism and Unauthorized Entry*, and BT2202, *Maintain Signs at Pump Stations and Breakout Tanks & Vessels*, under current CPPL Operator Qualification guidelines to conduct this maintenance procedure.



4.1.2 Only Qualified personnel shall perform these tests and inspections. This involves understanding such things as vandalism and site-security and requirements for signage. They should be capable of recognizing potential risks and taking necessary corrective measures.

4.2 Related Maintenance

CPPL-MPR-8001 *Right-of-Way Maintenance*

5. Safety

Security systems and signage should be kept in a well maintained condition to eliminate tripping hazards, damage to vehicle tires, falling objects, etc.

6. Procedure

6.1 Security

Security of facilities shall be maintained to provide protection for each pumping station and breakout tank area and other exposed facility (such as scraper traps, block valve locations) from vandalism and unauthorized entry. The following is a list of company recommended industry security measures that may be used in conjunction with other on the list. ConocoPhillips Pipeline and Terminals shall install and maintain security adequate to the risk and location of facilities. Allowable Security Types are:

- a) For manned facilities, follow the local ConocoPhillips Transportation Security Plan.
- b) Chain link fence
- c) Chain link fence with barbed wire
- d) Walls/Barriers
- e) Locks and Chains
- f) Lighting of facilities and remote pump stations.
- g) Block valve locations should be secured as determined by a risk assessment. Risks to consider: location, population and sensitivities. See CPPL-TSD-3202, *Standard for Valve Sites Outside Plants*.

6.1.1 COP has developed security minimal measures as follows:

- a) Ensuring signs are posted to warn of no trespassing and no unauthorized access is permitted
- b) Fencing the facility including barb wire top guard where appropriate
- c) Locking gates or vales which permit direct outward flow of a container's contents as required by the facility SPCC as applicable
- d) Facility lighting commensurate with the operation and the type and location of the facility.

6.1.2 In addition COP reviews the facility based on the following:

- a) Risk factors such as location of the facility, occupancies surrounding the facility, business criticality , public exposure.
- b) Regulatory status – CFATS, MTSA, TSA Critical
- c) Industry Standards – API security guide
- d) Threat – Threat information as provided by local/state/federal law enforcement



6.2 Signs

6.2.1 All facilities shall have a sign indentifying the Company name and a phone number to contact in the event of an emergency installed on every side of the facility, preferably at the gates.

6.2.2 The company shall maintain signs visible to the public around each pumping station and breakout tank area. Each sign must contain the name of the operator and an emergency telephone number to contact.

6.2.3 Signs printed with the Control Center Emergency telephone number 1-877-267-2290 (or older numbers which remain valid: 1-800-766-8230 or 1-800-231-2551); or, for Texas only, 1-800-833-6012; or the local number including area code, shall be maintained at the facilities.

6.2.4 All line markers on or near facilities shall be maintained per CPPL-MPR-8001, *Right-of-Way Maintenance*.



7. Abnormal Conditions

The following are the abnormal operating conditions (AOC) that could be encountered while performing this procedure and the appropriate response to make should the AOC be encountered:

7.1 Physical damage of a pipeline facility or component.

Make appropriate notifications.

7.2 Leak or unintended release of hydrocarbon from a pipeline component.

7.2.1 Make appropriate notifications or

7.2.2 If authorized, initiate emergency shutdown/ isolation of pipeline facility and/or component.

(End of Document)



Revision/Approval Log

Revision/Approval Log				
Rev. No.	Date	Action	Revision by	Approval by
0	2004-04-22	Initial issuance.	Randy Beggs	Randy Beggs
1	2011-03-23	Combined MPR-2201 and MPR-2202. Reformatted, and amended AOC and contact numbers.	Todd Tullio	Todd Tullio
2	2012-04-24	Updated Section 6.1 to include minimal security measures, risk factors, regulatory status and Industry Standards	Rob Yarbrough	