



Sunoco Logistics



Sunoco Pipeline L.P.
4041 Market St
Aston, PA 19014-3197

November 14, 2013

VIA CERTIFIED MAIL
US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Attn: Mr. Byron Coy, PE, Director, Eastern Region
820 Bear Tavern Road, Suite 103
Trenton, NJ, 08628

RE: CPF-1-2013-5016M (Notice of Amendment, 60-Day Extension of Time to Submit Amended Procedure)
Inspection of SPLP Trenton Unit Operations and Maintenance Procedures

Dear Mr. Coy,

We are in receipt of your 60-Day Extension of Time to Submit Amended Procedure letter dated September 27, 2013 in reference to Notice of Amendment (NOA) CPF-1-2013-5016M. The NOA required Sunoco Pipeline L.P. (SPLP) to modify its procedure for monitoring atmospheric corrosion and provide guidance on "how to 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 in accordance with 195.583(b)."

Sunoco Logistics L.P. (SPLP) provides training to its employees on how to perform atmospheric corrosion inspections. Please see separate attachment for your review identified as (Atmospheric Corrosion Inspection Guideline). The referenced guideline details our procedure for monitoring atmospheric corrosion and provides guidance on "how to give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbanding coatings, at pipe supports, in splash zones, at deck penetrations and in spans over water in accordance with 195.583(b)." Part 195.583 in the SPLP DOT 195 Maintenance Manual will be updated to include reference to the Atmospheric Corrosion Inspection Guideline.

Please accept this as SPLP's response to resolve the NOA fully and finally.

Should you have any questions or require further information, please contact Edward Patterson of our Honey Brook, PA office at 610-942-1924.

Respectfully Submitted,

David Chalson
VP, Operations
Sunoco Pipeline L.P.



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Enclosure

cc: Leif Jensen, Manager, Asset Integrity, Sunoco Pipeline LP
Kevin Dunleavy, Chief Counsel, Sunoco, Inc.
Carl Allebach, Corrosion Field Services Manager, Sunoco Pipeline LP
John Field, Pipeline Corrosion Engineer
Edward Patterson, DOT Compliance Specialist, Sunoco Pipeline LP



Atmospheric Corrosion Inspection Guideline

Atmospheric corrosion inspection and assessment is required for all piping exposed to the atmosphere. Inspections shall occur at least once every three calendar years, with an interval not to exceed 39 months. The record of each inspection is to be documented on Form - SUN 48070.

The purpose of the inspection is to identify any signs of corrosion or deteriorated coating that may become injurious to pipeline safety.

Site Inspection Procedure

1. Define the limits of the inspection unit (some examples include)
 - A. Valve setting within fence limits
 - B. Pump Station within fence limits
 - C. Specified area within tank farm
 - D. Span across canal, creek or through a vault
2. Define and document types of inspections required from Form Sun-48070 for each inspection unit. Types of atmospheric corrosion inspections for each inspection unit will include one or more of the following:
 - A. General above grade pipe/coating condition
 - B. Pipe exposure from natural causes or a designed span
 - C. Soil-to-air interface
 - D. Pipe supports
 - E. Deck/Wall/Dike (non-earthen) penetrations
3. During any atmospheric corrosion inspection, particular attention is required for the following areas:
 - A. Pipe at soil-to-air interfaces
 - B. Pipe supports
 - C. Under thermal/acoustic insulation
 - D. Deck penetrations
 - E. Splash zones
 - F. Spans over water
 - G. Under disbonded coatings

4. Specific Atmospheric Corrosion Inspection Guidelines for Areas Requiring Special Attention

A. Pipe at Soil-to-Air Interfaces

- A.1 Verify suitable coating (for corrosion protection above and below grade) exists at the interface and that it is in good condition. The transition coating should extend far enough above ground level to ensure that the piping will not be adversely affected by ground movement caused by precipitation and/or settlement. Typically, coating 12-inches or more above ground level will provide such protection. Suitable coatings typically include, but are not limited to, the following:
- Wax Tape
 - 2-part liquid epoxy
 - Polyethylene backed tape
 - FBE with UV resistant topcoat
 - Factory applied polyethylene
 - Coal tar
 - Somastic/Asphalt
- A.2. If coating is in good condition, with no signs of disbondment, failure or damage, no further action is required other than documentation.
- A.3 If coating is missing, has become disbonded, deteriorated or been damaged since the last inspection, the following steps must be taken.
- Remove area of failed/damaged coating to determine whether metal loss exists. This may require excavation down to where undamaged or good coating exists below grade.
 - If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.

B. Pipe Supports

- B.1 The point of contact must be visually or otherwise inspected to determine if any corrosion is being caused by moisture that may collect in the area.
- B.2 In some cases, where metal to metal contact exists, the pipe will need to be raised or the support lowered to allow for complete inspection of the pipe coating.
- B.3 If an unbonded non-metallic sleeve, saddle or pad exists between the pipe and support, the pipe still may need to be raised or the support lowered to allow for complete inspection of the coating underneath.

- B.4 If a bonded non-metallic sleeve, saddle or pad exists between the pipe and support, the inspection should focus on looking for any voids or areas where the bond between the pipe and sleeve/saddle has become compromised and could trap moisture. If the bond is sound, with no gaps or voids, and there is no sign of corrosion, then the inspection is complete.
- B.5 If there are areas observed where moisture can collect between the pipe and sleeve/saddle, the pipe may need to be raised or the support lowered to allow for complete inspection of the coating underneath.
- B.6 If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.

C. Thermal/Acoustic Insulation

- C.1 Visual inspection of pipe under insulation will require removal of designated sections of the insulation or the utilization of inspection ports. At least one inspection point (3" diameter minimum) per 50 feet of insulated pipe will be required for a complete inspection. Inspection points must include the 6:00 position on the pipe at a minimum 50' interval and include the 3:00, 12:00 and 9:00 positions at a minimum 100' interval. Low points and areas where water may be susceptible to collecting between the pipe and insulation shall be considered in selecting inspection points. Documentation of the underlying paint/coating condition is required.
- C.2 If the paint is in good condition at the inspection point, no other action is required other than documentation.
- C.3 If paint has deteriorated, the paint condition should be documented and the Area Supervisor should be notified of the condition and one of the following actions taken:
 - Remove the thermal insulation to determine the extent of the paint failure and to determine if metal loss exists. If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.
 - Schedule guided wave ultrasonic (GWUT) inspection to determine areas of metal loss for visual inspection follow up if metal loss is indicated.

D. Deck/Wall Penetrations

- D.1 Most wall and floor penetrations will not allow effective visual inspection without modification. Visual inspection on piping entering protected environments, such as pump rooms, will be limited to documenting any signs of paint deterioration or lack of paint or coating at the wall and/or floor interface. If paint/coating deterioration or lack of paint is noted, one of the following must occur:
- Modify the wall/floor penetration to allow visual inspection to determine if metal loss exists. If metal loss or pitted areas deeper than 10% of original wall thickness exist, Analysis per ASME B31G must be performed and results documented.
 - Schedule guided wave ultrasonic (GWUT) inspection to determine areas of metal loss for visual inspection follow up if metal loss is indicated.
- D.2 Wall, non-earthen dike, vault and/or deck penetrations exposed to the atmosphere shall be checked for a suitable coating that is in good condition. Examples of suitable coatings are the same listed above for Soil-to-Air Interfaces.
- D.3 If coating is in good condition, with no signs of disbondment, failure or damage, no further action is required other than documentation.
- D.4 If coating is missing, has become disbonded, deteriorated or been damaged since the last inspection, one of the following must occur.
- Remove area of failed/damaged coating to determine whether metal loss exists. This may require removal or modification of part of the deck or wall to allow for proper visual inspection.
 - Schedule guided wave ultrasonic (GWUT) inspection to determine areas of metal loss for visual inspection follow up if metal loss is indicated.
 - If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.

E. Splash Zones

- E.1 There are few, if any, in the SPLP system. Coating is required at the splash zone. The coating should extend high enough above the mean high tide level to provide corrosion protection in extreme tidal and weather conditions.
- E.2 If coating is visually observed to be in good condition, with no signs of disbondment, failure or damage, no further action is required other than documentation.

E.3 If coating is missing, has become disbonded, deteriorated or been damaged since the last inspection, the following steps must be taken.

- Remove area of failed/damaged coating to determine whether metal loss exists. This may require the use of divers or GWUT.
- If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.

F. Spans Over Water

F.1 For SPLP this typically applies to pipe exposures, both engineered and naturally occurring, across creeks, canals, rivers and drainage ditches.

F.2 Spans and SAI areas should be inspected closely for any coating damage.

F.3 Any large rocks, debris or other items that have the potential to cause physical damage to the coating or the pipe requires documentation.

F.4 Any indications of the span becoming longer, due to erosion or other natural causes, requires documentation.

G. Under Disbonded Coatings

G.1 This is not a specific engineered environment for SPLP, since non-bonded coatings are not used.

G.2 Disbonded coatings may be observed as a part of any inspection. If it is found, the following steps must be taken.

- Remove area of failed/damaged coating to determine whether metal loss exists.
- If metal loss or pitted areas deeper than 10% of original wall thickness exist, analysis per ASME B31G must be performed and results documented before any coating repairs are made. Contact the Asset Integrity Group with any questions or for further analysis of corrosion features exceeding the allowable dimensions listed in Tables 3-1 through 3-12 in ASME B-31G.