ENERGY TRANSFER

May 17, 2017 **VIA: Electronic Mail and FedEx**

Mr. James Urisko
Director, Southern Region
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
233 Peachtree Street NE
Suite 600
Atlanta, GA 30303

Re: CPF No. 2-2017-5002M
Notice of Amendment

Dear Mr. Urisko:

The Notice of Amendment (NOA) dated April 12, 2017 was issued to the Mid-Valley Pipeline Company (MVPL) and received on April 17, 2017. The MVPL system is operated by Sunoco Pipeline L.P. (SPLP), a wholly owned subsidiary of Energy Transfer Partners. This NOA provides for 30 days from receipt to respond. Attached is the SPLP response. SPLP believes that the procedural changes described within the response, the instruction delivered regarding these changes and the attached revised procedure adequately satisfies this NOA and requests closure of this case pending PHMSA review.

Should you have any questions or require further information, please contact Todd Nardozzi of our Sugar Land, TX office at 281-637-6576 or via email at todd.nardozzi@energytransfer.com

Sincerely,

David R. Chalson
Sr. VP - Operations
Sunoco Pipeline L.P.

Enclosure

Cc: Ryan Coffey
Joe Perez
Danny Nichols

1. §195.402 Procedural manual for operations, maintenance, and emergencies

(a) …

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

MVPL's corrosion control procedures do not contain adequate instruction on entering data into MVPL's corrosion control database.

MVPL Procedure OQP-011, titled *Conduct Annual Survey*, includes the following sections, as related to corrosion control data entry:

> 1.10. **DOCUMENT** all readings on the appropriate record form **OR CAPTURE** reading with data logger.
> 1.11. **RECORD OR TRANSFER** readings onto appropriate computer program AND REPORT all measurements to the SPLP Engineering Department.

Per field interviews and PHMSA record review, MVPL personnel regularly enter values of "999", "-999" or "0" into the corrosion database as a means of indicating that a valid pipe-to-soil (p/s) potential reading could not be made at a given test station. MVPL Procedure OQP-011 referenced above does not contain any instruction on this practice.

SPLP Response

SPLP does not disagree with PHMSA regarding the lack of instruction concerning the entry of values into the corrosion database when a valid pipe-to-soil potential reading cannot be made at a given test station. However, PHMSA has referenced OQP-011 'Conduct Annual Survey' as lacking this instruction. It is important to note that OQP-011 'Conduct Annual Survey" is not an operating procedure but rather utilized as a method to evaluate an individual's knowledge and ability to perform the Operator Qualification Covered Task of conducting an Annual Survey of cathodically protected structures including pipes, casings and tanks.

Therefore, SPLP has chosen to more appropriately address this NOA by including instruction in the SPLP DOT Maintenance Manual procedure 195.573 on the practice of entering a predetermined and consistent value in the corrosion database when a valid pipe-to-soil potential reading cannot be made at a given test station. Paragraph 1.,i., iv. has been added to instruct personnel to enter a value of '0.001' when a valid pipe-to-soil potential reading cannot be made along with a comment describing the condition. This will alert supervisory personnel reviewing the data to initiate the evaluation of appropriate remedial action(s) to be taken. SPLP also utilizes this method for rectifier and bond readings in the corrosion database and as such has added similar instruction to those sections of this same procedure.

Instruction has been delivered regarding this practice to affected personnel and the additions to the DOT Maintenance Manual procedure 195.573 will ensure that this practice is followed consistently. A copy of the revised procedure is attached to this response with additions highlighted in grey. Note that in the procedure the acronym "CMMS" is utilized. This acronym is defined in the SPLP DOT Maintenance Manual as *Computerized Maintenance Management System*.

Issued: 6-01-02 ***Annual Review: 8-24-16*** ***Last Revised:***	***SUBPART H:Corrosion Control***
	SEC. 195.573: Monitoring External Corrosion Control

195.573 MONITORING EXTERNAL CORROSION CONTROL

Purpose / Objective

To ensure that each subject component of an existing or new steel pipeline system, relocation or repair of an existing steel pipeline system and breakout storage tanks are provided with adequate and appropriate corrosion control measures for external corrosion. Compliance shall be determined by meeting one or more of the applicable criteria and other considerations for cathodic protection contained in paragraph 10.1.1.3 of NACE SP 0169 as incorporated by reference

Subject Components

1. Pipe Coating
2. Cathodic Protection Systems
3. Test Stations
4. Breakout Storage Tanks

Documentation

1. Cathodic protection and corrosion control monitoring data is maintained in a tabular format by the SPLP Eastern Area Corrosion Supervisor for the SPLP Eastern Area and at the district offices for the SPLP Western Area or in CMMS.

2. Close Interval Survey list will be maintained by the SPLP Eastern Area Corrosion Supervisor for the SPLP Eastern Area and at the district offices for the SPLP Western Area.

3. Records concerning monitoring of unprotected pipelines will be maintained by the SPLP Eastern Area Corrosion Supervisor for the SPLP Eastern Area and at the district offices for the SPLP Western Area.

4. Records of breakout tank leak detection inspections shall be maintained at the facility and in the DOT records file.

5. Maintenance Record (SUN- 43217, 43218 or CMMS, 43219)

6. Monthly Aboveground Storage Tank Inspection Report (Form Sun-42446-A)

SPLP Requirement / Process Description

1. Monitoring of Cathodically Protected Pipelines
    i. Inspection of Cathodic Protection Systems
        i. Annual tests to determine the adequacy of all existing cathodic protection systems for pipeline facilities including breakout storage tanks, buried station piping and pipelines. Annual tests shall be conducted once each calendar year, but with intervals not exceeding fifteen months. These records shall be retained for as long as the facility is in service except for breakout tanks for which these records shall be maintained for a minimum of five years.
        ii. Annual tests shall include:
            - Pipe-to-soil potentials at designated test stations;
            - Casing-to-soil potentials at cased road crossings where test facilities exist;
            - Pipe-to-soil potentials at designated foreign line crossings;
            - Rectifier output voltage and current readings.
            - Tank-to-soil potentials at breakout storage tanks
            - Pipe-to-soil potentials at buried station piping
        iii. Cathodic protection system deficiencies, such as damaged test leads, inadequate cathodic protection levels and/or defective ground bed, detected during annual or other testing shall be evaluated, with remedial actions taken prior to the next test interval as defined in Part 195 unless an engineering evaluation determines alternative measures to be adequate.
        iv. Should a valid pipe-to-soil reading be unable to be obtained, a code of “0.001” will be entered into CMMS to indicate such condition. A remark to explain the condition will accompany the entry to facilitate supervisor review of the condition and initiate the evaluation of appropriate remedial action(s) to be taken.
    ii. Close Interval Survey or Comparable Technology
        i. Prior to December 29, 2003 or not more than 2 years after cathodic protection is installed, whichever comes later, identify the circumstance in which a close-interval survey or other technology is practical and necessary to maintain effective and efficient operation of cathodic protection.
        ii. In making the determination as to whether it is necessary to conduct a close-interval survey or utilize comparable technology, paragraph 10.1.1.3 of NACE SP 0169 as currently incorporated by reference by Part 195 shall be followed. Sound engineering practices shall be used to determine if it is both practical and necessary to conduct a close-interval potential survey. If it is determined that a close-interval survey or comparable technology should be utilized, it should provide the following information:
            - Assess the effectiveness of the cathodic protection system;
            - Provide base line operating data;
            - Locate areas of inadequate protection levels;

- Identify locations likely to be adversely affected by construction, stray currents, or other unusual environmental conditions; or
- Select areas to be monitored periodically.

iii. A listing of line segments will be generated to document the pipeline segments where close-interval potential survey or comparable technology should be utilized to meet the requirements of paragraph 1.B.2 of this Sec. and where such testing is not practical and necessary. The listing will document the reasons why close-interval potential survey or comparable technology is not practical and necessary. If such testing is necessary, the type of testing to be utilized and the reasons for utilizing this testing procedure will be documented. This listing shall be maintained for as long as the facility remains in service.

2. Monitoring of Unprotected Pipelines
   i. Pipeline segments that are unprotected shall be reevaluated periodically.
   ii. Reevaluation surveys shall determine the areas of active corrosion. The following methods are acceptable means to determine areas of active corrosion:
      i. Electrical survey where practical.
      ii. In areas where electrical surveys are impractical, an analysis of leak repair, in-line-inspection data and repairs, corrosion monitoring records, maintenance reports and the pipeline environment may be used to determine areas of active corrosion.
      iii. Areas of unprotected pipelines found to have active corrosion shall have cathodic protection systems upgraded or other actions taken to achieve an acceptable level of cathodic protection or to achieve corrosion mitigation.
      iv. Reevaluation frequency - Beginning December 29, 2003, unprotected pipelines shall be evaluated at least once every 3 calendar years, but with intervals not exceeding 39 months.

3. Monitoring of Rectifiers and Interference Bonds
   i. The output of each rectifier unit or other impressed current power source shall be inspected six times each calendar year, but with intervals not exceeding 2-1/2 months. Records of these inspections shall be retained for a minimum of five years
      i. If the rectifier output drops below that required for adequate cathodic protection, the reason shall be determined and remedial action initiated prior to the next test interval as defined in Part 195 unless an engineering evaluation determines alternative measures to be adequate.
      ii. Should a valid rectifier output reading be unable to be obtained, a code of “0.001” will be entered into CMMS to indicate such condition. A remark to explain the condition will accompany the entry to

facilitate supervisor review of the condition and initiate the evaluation of appropriate remedial action(s) to be taken.

ii. An interference bond whose failure would create corrosive interference effects or reduce cathodic protection levels on the SPLP structure is considered a critical bond. Each critical bond shall be electrically checked for proper performance six times each calendar year, but with intervals not exceeding 2-1/2 months. Each other interference bond or non-critical interference bond shall be checked once each calendar year, but with intervals not exceeding fifteen months. Records of these inspections shall be retained for a minimum of five years

i. If the bond current deviates significantly from acceptable levels, the reason shall be evaluated and remedial action initiated prior to the next test interval as defined in Part 195 unless an engineering evaluation determines alternative measures to be adequate.

ii. Should a valid interference bond reading be unable to be obtained, a code of "0.001" will be entered into CMMS to indicate such condition. A remark to explain the condition will accompany the entry to facilitate supervisor review of the condition and initiate the evaluation of appropriate remedial action(s) to be taken.

4. Monitoring of Cathodically Protected Aboveground Breakout Storage Tank Bottoms:
   i. See Sec. 195.563 of this manual for applicability;
   ii. All aboveground breakout tank rectifiers will be inspected at least 6 times each calendar year but with intervals not greater than 2½ months. Bimonthly monitoring will include documentation of the rectifier DC output volts and amperes, as a minimum.
   iii. All aboveground breakout tank cathodic protection systems will be inspected for proper operation once each calendar year, but with intervals not exceeding 15 months. The inspections shall be consistent with Sec. H, Part 195.573, paragraph 1.A.2 and the evaluation process described in Sec. H, Part 195.571.
   iv. Corrective measures, including adjustment, repair, replacement, or the addition of supplementary CP systems, shall be taken where inspections and tests indicate that cathodic protection of the breakout storage tank bottom is no longer adequate. Remedial actions shall be initiated prior to the next test interval as defined in Part 195 unless an engineering evaluation determines alternative measures to be adequate.

5. Monitoring of Aboveground Breakout Storage Tank Bottoms with Alternative Corrosion Control Measures (other than cathodic protection):
   i. See Sec. 195.563 of this maintenance manual for applicability;
   ii. Monitor leak detection ports monthly as part of the monthly visual breakout tank inspection report.

iii. A record of leak detection inspections shall be maintained at the facility and in the DOT records file. These records shall be retained a minimum of five (5) years.

Notes or Remarks

1. Sec.195.563 of this Maintenance Manual

2. Sec.195.565 of this Maintenance Manual

3. NACE SP 0169 "Control of External Corrosion on Underground or Submerged Metallic Piping Systems"

4. API Recommended Practice 651, “Cathodic Protection of Aboveground Petroleum Storage Tanks”

5. NACE RP0193, "External Cathodic Protection of On-Grade Carbon Steel Tank Bottoms”

REFER TO SEC. 195.3 OF THIS MAINTENANCE MANUAL FOR THE SPECIFIC EDITIONS OF THE ABOVE REFERENCED DOCUMENT FOR THE APPLICABLE EDITIONS OF THE DOCUMENT THAT CONTAINS THE MATERIALS INCORPORATED BY REFERENCE (IBR) IN PART 195. OLDER OR NEWER VERSIONS OF AN IBR ARE NOT VALID UNLESS SPECIFICALLY NOTED.

Definitions Specific to Sec. 571 and 573.

“Engineering Evaluation” – An evaluation of information from additional testing, follow up actions or alternate data sets (including, but not limited to: ILI, CIS, corrosion rates, net protective current measurements). An engineering evaluation is performed by a qualified individual (Corrosion Supervisor, Corrosion Engineer, Corrosion Technician or Integrity Specialist). It is documented by notes, documents or data that is entered in the applicable location on the SPLP corrosion database.

“Sound Engineering Practices” Reasoning exhibited or based on thorough knowledge and experience, logically valid and having technically correct premises that demonstrate good judgment or sense in the application of science.

“Other Technology” or “Comparable Technology” - Other Technology / Comparable Technology include, but are not limited to, CP coupons, ER probes, net CP current inline inspection tools, DC and AC voltage gradient surveys.