July 19, 2016

VIA CERTIFIED MAIL AND FAX TO:

Mr. J. Andrew Drake
Vice President, Operations and Emergency, Health & Safety
Spectra Energy Partners, LP
5400 Westheimer Court
Houston, TX 77056

Re: CPF No. 1-2016-1004H

Dear Mr. Drake:

Enclosed is an Amended Corrective Action Order issued in the above-referenced case to your subsidiary, Texas Eastern Transmission, LP, containing new and amended preliminary findings and requiring TET to take additional corrective actions with respect to the Delmont Compressor Station pipeline section of TET's Penn Jersey System that failed on April 29, 2016, near Delmont, Pennsylvania. This Amended Corrective Action Order supersedes and replaces the original Corrective Action Order issued to TET on May 4, 2016. Service is being made by certified mail and facsimile. Service of the Amended Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Amended Order are effective upon completion of service.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, OPS
Mr. Byron Coy, P.E., Director, Eastern Region, OPS

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Texas Eastern Transmission, LP, a subsidiary of Spectra Energy Partners, LP,	)	**CPF No. 1-2016-1004H**
Respondent.	)	

AMENDED CORRECTIVE ACTION ORDER

Purpose and Background:

This Amended Corrective Action Order (Amended Order) is being issued under the authority of 49 U.S.C. § 60112, to require Texas Eastern Transmission, LP (TET or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with the recent gas transmission pipeline failure on TET's Penn-Jersey System (PJS). The PJS is owned by Spectra Energy Partners, LP (Spectra) and is operated by TET.

On April 29, 2016, a reportable accident occurred on Line 27 of the PJS, resulting in the release of 208,425 thousand cubic feet (MCF)of natural gas which ignited, destroying one home and causing severe injuries to one individual (Failure). The PJS transports natural gas from the discharge of the Delmont Compressor Station in Salem Township, Pennsylvania, to Lambertville Station near Lambertville, New Jersey, a distance of approximately 263 miles. Near the site of the Failure, the PJS consists of four pipelines (Lines 12, 19, 27, and 28 loop) between 24 and 36 inches in diameter. Field investigations conducted by PHMSA indicated that the preliminary cause of the rupture was external corrosion due to coating failure of the girth weld. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

On May 4, 2016, PHMSA issued the original Corrective Action Order (CAO) in this case, ordering TET to take necessary corrective actions and to provide additional information to PHMSA. After receiving and analyzing additional data in the course of this investigation, PHMSA has amended the preliminary findings in the CAO and identified other corrective measures that need to be taken on pipelines in the PSJ, as more fully described below. Accordingly, PHMSA is notifying Respondent of additional measures that are required and is issuing this Amended Order. The Preliminary Findings and Required Corrective Actions contained in this Amended Order supersede and replace those contained in the original CAO.

Amended Preliminary Findings:

- Texas Eastern Transmission, LP (TET), is a limited partnership subsidiary of Spectra Energy Partners, LP (Spectra). TET operates approximately 9,096 miles of natural gas transmission pipeline and approximately 74 Bcf of natural gas storage capacity in the eastern United States.[1]

- The failed pipeline (Line 27) is a 30-inch diameter line that transports natural gas from the discharge of the Delmont Compressor Station (MP 0.41) in Salem Township, Pennsylvania, to Lambertville Station (MP 263.39), and is one of four PJS pipelines in a common right-of-way near the scene of the Failure.

- "Isolated Segment" refers to the 15-mile segment of Line 27 running from the discharge of the Delmont Compressor Station (MP 0.41) in Delmont, Pennsylvania, to the Conemaugh River Valves (MP 15.45). It is the portion of Line 27 that was shut-in after the Failure by closing main line valve MLV 27-263 and cross-over valves 27-917 and 27-273 downstream of the Failure Site, and MLV 27-289 upstream of the Failure Site. The Isolated Segment will remain shut-in until a restart plan is approved by the "Director."

- "Affected Segment" refers collectively to the four pipelines that make up the Penn Jersey System. (the 30-inch Line 27, the 24-inch Line 12, the 30-inch Line 19, and the 36-inch Line 28 loop) from Delmont Compressor Station to Lambertville Station. The Affected Segment generally runs east across Pennsylvania and passes through portions of Westmoreland, Indiana, Columbia, Blair, Huntingdon, Juniata, Perry, Dauphin, Lebanon, Berks, Chester, Lehigh, and Bucks Counties in Pennsylvania, and Hunterdon County in New Jersey.

- "Adjacent Pipelines" refers to the other three Affected Segment pipelines (the 24-inch Line 12, the 30-inch Line 19, and the 36-inch Line 28 loop), which run parallel to Line 27 in the vicinity of the Failure.

- Three of the lines on the Affected Segment, including Lines 27, 19, and 12, share a single right-of-way from Delmont to Lambertville, for the entire distance of 263 miles. The third Adjacent Pipeline, Line 28 loop, ties into Line 27 at various points throughout the Penn Jersey System covering 104.12 miles between the Delmont and Lambertville Stations. The Failure occurred near milepost 2.0621 east of Delmont, Pennsylvania (Failure Site). At the Failure Site, the distances between each of the four lines range approximately from 25 to 28 feet. All four lines of the Affected Segment are linked with crossover interconnects; accordingly, pressure is usually equal across all four lines.

- The portion of Line 27 near the Failure Site was constructed in 1981 and consists of 0.404-inch wall thickness, X65 grade double submerged arc-welded pipe, manufactured

[1] http://www.spectraenergy.com/Operations/US-Natural-Gas-Operations/US-Pipelines/Texas-Eastern-Transmission/ (last accessed June 30, 2016).

by US Steel. Line 27 is coated with Fusion Bond Epoxy (FBE), with tape-coat coating at girth weld joints.

- The Affected Segment has a Maximum Allowable Operating Pressure (MAOP) of 1050 psig, as measured by a pressure transducer on the discharge header at the Delmont Compressor Station, established for Line 27 by hydrostatic testing in 1981. TET initially reported that the line pressure was approximately 1,040 psig immediately prior to the Failure.

- Prior to the Failure, three of the four lines (Lines 19, 27, and 28) on the Affected Segment were in normal operating status with gas flowing east towards Lambertville Station on the system. The fourth line (Line 12) had been taken out of service days prior to the Failure and blown down for maintenance work from Delmont Station to Armaugh Station.

- The Failure occurred at approximately 8:13 a.m. EDT on April 29, 2016. At that time, TET personnel located at the Delmont Compressor Station heard a loud explosion and the sound of natural gas being released from an undetermined location. The Failure resulted in the release of 208,425 MCF of natural gas, which ignited, producing a crater approximately 30 feet wide, 50 feet in length, and 12 feet deep and a burn zone of approximately ¼ mile radius. The explosion resulted in the ejection of approximately 24.5 feet of 30-inch pipe, which landed approximately 100 feet from the rupture site. The Failure occurred in a rural class 1 area. The Failure was reported to the National Response Center (NRC Report No. 1146495) on April 29, 2016, at approximately 9:15 a.m. EDT.

- The TET personnel in Delmont contacted Spectra's Pipeline Control Center (PCC) located in Houston, Texas, to alert them to the situation. PCC personnel observed a pressure drop on the Affected Segment at the discharge side of the Delmont Compressor Station and ordered a complete shutdown of all PJS pipelines. TET personnel were dispatched to begin closing mainline block valves within the Delmont Compressor Station to isolate the lines. As a result of the valve closures, TET personnel identified Line 27 as the failed pipeline. Direct observations were made in the field and confirmed that the Failure had occurred on Line 27. The Affected Segment is currently shut-in and isolated between the Delmont Compressor Station at MP 0.41 and the Conemaugh River Valves at MP 15.45. The Affected Segment was shut-in after the Failure by closing main line valve (MLV) 27-263 and crossover valves 27-917 and 27-273 downstream of the Failure Site at the Conemaugh River Valves, and MLV 27-289 upstream of the Failure Site at the Delmont Compressor Station.

- PHMSA, along with various state and local emergency responders responded to the scene on the day of the Failure. A third-party metallurgist (DNV GL), contracted by Spectra, was also at the scene of the Failure later the same day.

- The cause of the Failure is unknown at this time, and the investigation is ongoing. The failed pipe section has been transported to an independent metallurgist for examination and failure analysis. The preliminary investigation has identified evidence of external

corrosion at circumferential welds at the Failure Site. The pattern of corrosion indicates disbondment of the coating material applied to the girth weld joints. The Isolated Segment and the portions of Lines 12 and 28 between Delmont and Armaugh Stations remain shut-in and out of service pending integrity assessment. The remainder of Line 27 from Armaugh Station to Lambertville Station, along with the rest of the Affected Segment, was reduced to 80% of the operating pressure at the time of failure. This reduction in pressure was initiated by Spectra to provide an additional level of safety during the integrity assessment work that is being conducted throughout the PJS.

- On May 9, 2016, upon completion of integrity assessments, TET requested approval to return Line 19 to normal operating service between Delmont Station and Armaugh Station. On May 9, 2016, PHMSA approved TET's request and Line 19 was returned to normal operating service on May 31, 2016. The rest of the Affected Segment, other than the Isolated Segment and the portions of Lines 12 and 28 between Delmont and Armaugh Stations, continues to operate at the reduced 80% operating pressure.

- The Failure caused one known injury to a man residing near the Failure Site, with third-degree burns over 75% of his body. The injured man was admitted to a local hospital.

- Emergency responders evacuated nine homes in the area and closed nearby roads, including Route 819. Three homes within a quarter mile of the Failure Site received external damage due to the radiant heat from the fire and one home was destroyed. The fire burned an area approximately one-quarter of a mile in radius, burning trees and vegetation. Beaver Run Creek near the Failure Site was not impacted. The other three lines of the Affected Segment running in the same right-of-way as Line 27 were not exposed by the explosion.

- Recent in-line inspections (ILI) of Line 27 of the Isolated Segment occurred in 2005 and 2012, using high-resolution magnetic flux leakage (MFL) and inertial measurement unit (IMU) tools.

- A review of previous operating history, ILI, and remediation records for the segment of Line 12 between Delmont and Armaugh Stations has shown a pattern of external corrosion with characteristics similar to the condition that caused the failure on Line 27.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order or Amended Order, without prior notice and opportunity for hearing,

upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that continued operation of the Affected Segment from Delmont Station to MP 15.45 without corrective measures is or would be hazardous to life, property, or the environment. In addition to the failed Line 27, subsequent investigation by Respondent and PHMSA has demonstrated that Lines 12, 19, and 28 could potentially have been damaged or adversely affected by the explosion and fire at the Failure Site and pose a serious risk to life, property or the environment if returned to normal operation unless Respondent takes certain corrective actions in addition to those required under the original CAO. Having considered the uncertainties of the cause of the Failure, the location of the Failure, the recent discovery of additional external corrosion on other portions of the Affected Segment besides Line 27, and the risk of fire or harm to the environment and populated areas in the vicinity of the Affected Segment, I further find that a failure to issue this Amended Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

Accordingly, this Amended Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Amended Order are effective upon receipt.

Within 10 days of receipt of this Amended Order, Respondent may contest its issuance and obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Eastern Region, OPS, PHMSA (Director). The Director's address is 820 Bear Tavern Road, Suite 103, West Trenton, NJ 08628. If Respondent requests a hearing, it will be held telephonically or in-person in Trenton, New Jersey, or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken on the Affected Segment or other pipelines in the PSJ. In that event, PHMSA will notify Respondent of any additional measures that are required and another amended Order will be issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Pursuant to 49 U.S.C. § 60112, I hereby order Texas Eastern Transmission, LP to immediately take the following corrective actions for the Affected Segment:

1. *Assessment, Remediation and Restart Plans.* Prior to resuming operation of the section of the PJS running between the Delmont Compressor Station at MP 0.41 and the Conemaugh River Valves at MP 15.45, develop written assessment, remediation and re-start plans for each pipeline, and submit for approval by the Director, PHMSA. The plans must include:

(A) Procedures for the exposure, testing, and remediation of Line 27:

i. Exposure of Line 27 extending for at least two girth welds on either side of the Failure Site to examine for corrosion, coating condition, concussive damage, and thermally -impacted areas. If damage to the exposed pipe is discovered, additional pipe must be exposed until at least ten feet of undamaged pipe is exposed and examined. Perform safe operating pressure calculations and remediation for any pits or other forms of anomalies found, using engineering permanent repair methods and design factors based upon 49 C.F.R. §§ 192.713 and 192.111 and using ASME/ANSI B31G or R-STRENG methods. Repair or replace pipe or coating, as necessary. Upon completion of pipe replacement and repairs, ensure proper backfill and protection from stones and rocks, pursuant to procedures developed under this Amended Order;

ii. Restoration and verification of adequate cathodic protection for the area where the Failure occurred. Repair or replace any damaged rectifier(s) and establish a permanent electrical test station with an above-grade test point in a protected location. Once backfill and land settling have occurred, ensure pipe-to-soil readings are within applicable criteria by performing a close-interval-survey for 1 mile up and down-stream of the Failure Site, on all four pipelines.

iii. Development of additional requirements for remediation and the eventual restart for Line 27 as the investigation yields more information about the cause of the Failure and the condition of the Affected Segment. All remediation work on the Affected Segment of Line 27 must be completed prior to restart.

iv. Prior to the restart of Line 27, conduct a hydrostatic test on Line 27 from Delmont Station (MP 0.41) to Armaugh Station (MP 27.10). Hydrostatic testing must be conducted in accordance with written procedures. The hydrostatic test must be conducted to a test pressure of at least 125 percent of maximum operating pressure.

v. Conduct an ILI on Line 27 from Delmont Station (MP 0.41) to Lambertville Station (MP 263.39) using High Resolution MFL with Geometry and IMU capabilities or other tools capable of assessing the pipeline system for conditions related to the cause of the Failure. Spectra must justify the selection of ILI tools and receive written permission from the Director prior to any ILI runs.

vi. Restart of Line 27 must be done in increments, at 25%, 50%, and 80%, to be held for at least one hour after pressure stabilization. After reaching 80% pressure, Respondent must obtain specific individual written approval from the Director to increase pressure to pre-Failure normal pressure. Respondent must obtain approval before increasing pressure to the final normal operating pressure.

(B) Procedures for the exposure, examination, remediation, and restart of Lines 12, 19, and 28 must include:

i. The development of assessment, remediation, and restart plans that are aligned with the criteria shown immediately below;

ii. The exposure of Lines 12, 19, and 28, extending for at least two girth welds in both directions from the Failure Site. Examine the girth welds and pipeline coating materials for damage caused by thermal and concussive forces. Continue a broader exposure of each line if associated damage is discovered, until 10 feet of undamaged pipe is reached and verified. Any needed repairs are to be guided by established Spectra procedures and safe operating -pressure calculations and remediation for any pits or other forms of anomalies found, using engineering permanent repair methods and design factors based upon 49 C.F.R. §§ 192.713 and 192.111 and using ASME/ANSI B31G or R-STRENG methods. Repair or replace pipe or coating, as necessary. Upon completion of pipe replacement and repairs, ensure proper backfill and protection from stones and rocks, all pursuant to Spectra's established procedures;

iii. Conduct a hydrostatic test on Line 12 from Delmont Station (MP 0.41) to Armaugh Station (MP 27.10). Hydrostatic testing must be conducted in accordance with written procedures. The hydrostatic test must be conducted to a test pressure of at least 125 percent of maximum operating pressure.

iv. Restarts for each individual line in pressure increments, at 25%, 50%, and 80%, to be held for at least one hour after pressure stabilization. After reaching 80% pressure, Respondent must obtain specific individual written approval from the Director to increase pressure to pre-Failure normal pressure. Respondent must obtain separate approval for each pipe (Lines 12, 19, and 28) before increasing pressure to the final normal operating pressure;

v. A ground-level, hydrogen flame ionization (HFI) leak survey on Lines 12, 19, and 28, for a distance of two miles in both directions from the Failure Site. Investigate any elevated readings and make all appropriate repairs; and

2. *Testing and Failure Analysis.* Mechanical and metallurgical testing and failure analysis of the failed pipe, including analysis of soil samples and any foreign materials, must be completed by June 17, 2016, as follows:

(A) Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure Site;

(B) Utilize the mechanical and metallurgical testing protocols, including the testing laboratory approved by the Director;

(C) Prior to commencing the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow a PHMSA representative to witness the testing; and

(D) Ensure that the testing laboratory distributes all resulting reports in their entirety (including all media), whether draft or final, to the Director at the same time as they are made available to Respondent.

3. *Availability of Prior ILI Assessments.* Within 60 days of the date of this Amended Order, make all results or information received from the most recent ILI I tool runs conducted on the Affected Segment, including information obtained from any resulting excavations and all associated re-coats and repairs, available to PHMSA or its representative in their entirety (including all media). Additionally, determine whether any anomalies were present that could have contributed to the Failure and whether any other anomalies of a similar magnitude are present elsewhere in the Affected Segment. Make the results of this analysis available to PHMSA.

4. *Incorporation by Reference.* The work plans will be incorporated into this Amended Order and shall be revised as necessary when additional information becomes available which may influence changes. Submit any such proposed plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.

5. *Implementation of Work Plans.* Implement the work plans as approved by the Director, including any revisions to the work plan.

Other Requirements:

6. *Root Cause Failure Analysis.* Within (90) days following receipt of this Amended Order, Spectra must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the failure. The final report must include findings and any lessons learned and whether the findings and any lessons learned are applicable to other locations within Spectra's PJS system.

7. *Emergency Response Plan and Training Review*. Spectra must review and assess the effectiveness of its emergency response plan with regards to the Failure. Include in the review and assessment the on-scene response and support, coordination, and communication with emergency responders and public officials. Also, include a review and assessment of the effectiveness of its emergency training program. Spectra must amend its Emergency Response Plan and emergency training, if necessary, to reflect the results of this review. The documentation of this Emergency Response Plan and Training Review and any changes made to response plans and emergency training must be available for inspection by OPS or provided to the Director, if requested.

8. *Public Awareness Program Review*. Spectra must review and assess the effectiveness of its Public Awareness Program, incorporating lessons learned from the Failure. Spectra must

amend its Public Awareness Program, if necessary, to reflect the results of this review. The documentation of this Public Awareness Program Review and any changes made to response plans and emergency training must be available for inspection by OPS or provided to the Director, if requested.

9. Remedial Work Plan (RWP).

(A) Within 60 days following receipt of this Amended Order, Spectra must submit a Remedial Work Plan (RWP) to the Director for approval.

(B) The Director may approve the RWP incrementally without approving the entire RWP.

(C) Once approved by the Director, the RWP will be incorporated by reference into this Amended Order.

(D) The RWP must specify the tests, inspections, assessments, evaluations, and remedial measures Spectra will use to verify the integrity of the Affected Segment, including the Adjacent Pipelines. It must address all known or suspected factors and causes of the Failure. Spectra should consider both the risk and consequences of another potential failure to develop a prioritized schedule for RWP-related work along the Affected Segment.

(E) The RWP must include, at minimum, the following objectives, for which related procedures or other written processes must be established:

i. Identify pipe in the Affected Segment, including the Adjacent Pipelines (Lines 12, 19, 28) with anomalous characteristics similar to those identified as contributing factors in the April 29, 2016 Failure.

ii. Gather all data necessary to review the failure history (in-service and pressure-test failures) of the Affected Segment, including the Adjacent Pipelines, and prepare a written report containing all the available information such as the locations, dates, and causes of leaks and failures with characteristics similar to the contributing factors identified for the April 29, 2016 Failure.

iii. Integrate the results of the metallurgical testing, RCFA, and other corrective actions required by this Amended Order with all relevant pre-existing operational and assessment data for the Affected Segment, including the Adjacent Pipelines. Pre-existing operational data includes, but is not limited to, construction, operations, maintenance, testing, repairs, prior metallurgical analyses, and any third party consultation information. Pre-existing assessment data includes, but is not limited to, ILI tool runs, hydrostatic pressure testing, direct assessments, close interval surveys, and direct/alternating current voltage gradient surveys.

iv. Conduct additional field tests, inspections, assessments, and/or evaluations of all four lines that comprise the Affected Segment, to determine whether, and to what extent, conditions exist with characteristics similar to the contributing factors

identified for the Failure. At a minimum, this process must consider the following factors, or provide a detailed explanation by certain of these factors should not be included:

(a) ILI tools that are technically appropriate for assessing the pipeline system for conditions related to attributing factors based on the cause of the Failure, and that can reliably detect and identify anomalies;

(b) Hydrostatic pressure testing;

(c) Close-interval surveys;

(d) Cathodic protection surveys, to include interference surveys in coordination with other utilities (e.g. underground utilities, overhead power lines, etc.) in the area;

(e) Coating surveys;

(f) Stress corrosion cracking surveys;

(g) Selective seam corrosion surveys; and

(h) Other tests, inspections, assessments, and evaluations identified by the operator appropriate for the failure causes.[2]

v. Describe the inspection and repair criteria Spectra will use to prioritize, excavate, evaluate, and repair anomalies, imperfections, and other identified integrity threats. Include a description of how any defects will be graded and a schedule for repairs or replacement.

vi. Based on the known history and condition of the Affected Segment, provide specifications for the methods Spectra will use to repair, replace, or take other corrective measures to remediate the conditions associated with the Failure and to address other identified integrity threats along all four lines comprising the Affected Segment. The repair, replacement, or other corrective measures must meet the criteria specified in subsection vi above.

vii. Implement continuing long-term periodic testing and integrity verification measures to ensure the ongoing safe operation of the Affected Segment considering the results of the analyses, inspections, evaluations, and corrective measures undertaken pursuant to the Amended Order.

[2] Note: Spectra may use the results of previous tests, inspections, assessments, and evaluations if performed later than January 1, 2014, and approved by the Director, provided the results of the tests, inspections, assessments, and evaluations are analyzed with regard to the factors known or suspected to have caused the Failure.

(F) Include a proposed schedule for tasks included in completion of the RWP.

(G) Spectra must revise the RWP as necessary to incorporate new information obtained during the failure investigation and remedial activities.

i. Submit any plan revisions to the Director for prior approval.

ii. The Director may approve plan revisions incrementally.

iii. Any and all revisions to the RWP after it has been approved and incorporated by reference into this Amended Order will be fully described and documented in the CAO Documentation Report (CDR).

(H) Implement the RWP as approved by the Director, including any revisions to the plan.

10. *CAO Documentation Report (CDR).* Spectra must create and revise, as necessary, a CAO Documentation Report (CDR). After Spectra completes all the items in this Amended Order, it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by Spectra with regards to this Amended Order prior to approving the closure of this Amended Order. The CDR must summarize all activities and documentation associated with this Amended Order in one document.

(A) The Director may approve the CDR incrementally without approving the entire CDR.

(B) Once approved by the Director, the CDR will be incorporated by reference into this Amended Order.

(C) The CDR must include, but not be limited to:

i. Table of Contents;

ii. Summary of the April 29, 2016 Failure, and the response activities associated with the Failure;

iii. Summary of pipe data/properties and all prior assessments of the Affected Segment;

iv. Summary of all tests, inspections, assessments, evaluations, and analysis required by this Amended Order;

v. Summary of the mechanical and metallurgical testing, as required by this Amended Order;

vi. Summary of the RCFA with all root causes, as required by this Amended Order;

vii. Documentation of all actions taken by Spectra to implement the RWP, the results of those actions, and the inspection and repair criteria used;

viii. Documentation of any revisions to the RWP, including those necessary to incorporate the results of actions undertaken pursuant to this Amended Order and, whenever necessary, to incorporate new information obtained during the failure investigation and remedial activities;

ix. Lessons learned while completing this Amended Order;

x. A path forward describing specific actions Spectra will take on its entire pipeline system as a result of the lessons learned from work on this Amended Order; and

xi. Appendices (if required).

11. *Reporting.* Submit monthly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Amended Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first monthly report for the period April 29 through May 31 is due on June 10, 2016, with subsequent monthly reports due on the 10th of each succeeding month. The Director may change the interval for the submission of these reports.

12. *Documentation of Costs.* It is requested but not required that Respondent maintain documentation of the costs associated with implementation of this Amended Order. Include in each monthly report the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

13. *Approvals.* With respect to each submission requiring the approval of the Director, the Director may: (a) approve the submission in whole or in part; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove the submission in whole or in part and direct Respondent to modify the submission; or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission, as approved or modified by the Director. If the Director disapproves all or any portion of a submission, Respondent must correct all deficiencies within the time specified by the Director and resubmit it for approval.

14. *Extensions of Time.* The Director may grant an extension of time for compliance with any of the terms of this Amended Order upon a written request timely submitted and demonstrating good cause for an extension.

The actions required by this Amended Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 192, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq*., or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

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).

Failure to comply with this Amended Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. 1-2016-1004H and for each document you submit, please provide a copy in electronic format whenever possible. The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

_____ _____

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Date Issued