



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

February 17, 2026

VIA ELECTRONIC MAIL TO: gbacon@eprod.com

Graham Bacon
Executive Vice President, Chief Operating Officer
Enterprise Products Operating, LLC
1100 Louisiana Street
Houston, TX 77002

Re: CPF No. 4-2026-005-CAO

Dear Mr. Bacon,

Enclosed please find a Corrective Action Order (Order) issued by the Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety. It requires Enterprise Products Operating, LLC, to take certain corrective actions with respect to a pipeline failure that occurred on the East Leg Loop pipeline in Washington County, Iowa, on February 14, 2026.

Service by electronic mail is effective upon the date of transmission and acknowledgment of receipt as provided under 49 CFR § 190.5. The terms and conditions of this Order are effective upon completion of service.

Sincerely,

Linda Daugherty
Acting Associate Administrator
for Pipeline Safety

Enclosure: Corrective Action Order

cc: Mr. Bryan Lethcoe, Director, Southwest Region, Office of Pipeline Safety, PHMSA
Suzie Davis, Senior Manager, Compliance, Enterprise Products Operating, LLC,
smdavis@eprod.com

CONFIRMATION OF RECEIPT REQUESTED

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

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| In the Matter of |) | |
| |) | |
| Enterprise Products Operating, LLC, |) | CPF No. 4-2026-005-CAO |
| |) | |
| Respondent. |) | |
| |) | |
| |) | |

CORRECTIVE ACTION ORDER

Purpose and Background

Pursuant to the authority provided in 49 U.S.C. § 60112, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), is issuing this Corrective Action Order (CAO or Order) to Enterprise Products Operating, LLC (Enterprise or Respondent). The Order requires Enterprise to take certain necessary corrective actions to protect the public, property, and the environment from potential hazards associated with a failure that occurred on the East Leg Loop pipeline (East Leg Loop or Pipeline)¹ near Brighton, Washington County, Iowa, on February 14, 2026 (Failure). The East Leg Loop is a hazardous liquid pipeline facility subject to PHMSA’s jurisdiction pursuant to the Pipeline Safety Act, 49 U.S.C. § 60101 et seq., and Pipeline Safety Regulations, 49 CFR Parts 190 to 199.

The East Leg Loop Pipeline is part of Enterprise’s 8,000-mile MAPCO pipeline system. The MAPCO system includes two parallel pipelines (the 8” East Leg Mainline and the 10” East Leg Loop) that transport liquified petroleum gas (LPG) from Conway, Kansas, to Janesville, Wisconsin. The Failure occurred on a portion of the East Leg Loop that traverses a rural, agricultural area, and resulted in an explosion and sustained fire that required two road closures and responses from four local fire departments. Enterprise isolated the affected portion of the Pipeline after the Failure and sent the failed section of pipe to a third-party expert for inspection and metallurgical analysis. Enterprise has not yet returned the East Loop Pipeline to service.

Pursuant to 49 U.S.C. § 60117, PHMSA has initiated an investigation of the Failure. The preliminary findings of that ongoing investigation are as follows:

¹ Enterprise Products Operating, LLC's East Leg Loop Pipeline is part of the MAPCO pipeline system present in 13 states. The MAPCO pipeline system is a Liquefied Petroleum Gas (LPG) pipeline system consisting of four primary segments, totaling approximately 8,074 miles in length. The 2,113-mile Conway North pipelines (East Red and Blue lines) link the NGL hub at Conway, Kansas, to refineries, petrochemical plants and propane markets in the upper-Midwest.

Preliminary Findings

- The East Leg Loop Pipeline is a 10-inch diameter pipeline that transports LPG from Conway, Kansas, to Janesville, Wisconsin. This portion of the East Leg Loop Pipeline includes 5 pump stations and two navigable water crossings.
- At approximately 10:50 AM on February 14, 2026, Enterprise observed a pressure drop on the East Leg Loop. The pressure drop resulted from the Failure, which occurred at the top of a slope several hundred yards south of the Skunk River in a rural, agricultural area near Brighton, Iowa.
- After detecting the Failure, Enterprise shut in a portion of the East Leg Loop Pipeline, closing valves at milepost (MP) 21.6 and MP 23.3. Enterprise also received a public report of a large fire near Brighton, Iowa
- Enterprise notified the National Response Center (NRC) of the Failure at 1:04 PM Eastern Time on February 14, 2026. Enterprise provided a second NRC notification at 4:29 PM Eastern Time on February 14, 2026. Enterprise provided a third NRC notification at 3:12 AM Eastern Time on February 16, 2026. In its third NRC notification, Enterprise reported an estimated spill volume of 2000 barrels.
- At the point of Failure, investigators observed a four-foot section of ejected pipe with visible external corrosion. The failed pipe appears to be a location previously excavated and inspected. The two sections of pipeline that remained in place in the crater showed visible signs of misalignment.
- Enterprise has cut out the failed section of the East Leg Pipeline and is transporting the pipe to Acuren in Magnolia, Texas, for inspection and metallurgical analysis.
- The portion of the East Leg Loop that experienced the Failure was originally constructed in 1972. The pipe at the location of the Failure is 0.188 inches thick, API 5L grade X-52, manufactured by American Steel with high frequency electric resistance welding (HF-ERW) seams. The Pipeline has plastic tape coating and cathodic protection. The maximum operating pressure (MOP) of the Pipeline is 1310 psig. The operating pressure of the time of the Failure was between 1265 and 1172 psig.
- The release of LPG poses a risk to public safety, property, and the environment. The Failure resulted in an explosion and sustained fire that required response from four local fire departments and two road closures.
- Previously, on November 29, 2016, a failure occurred on a section of the East Leg Loop Pipeline in Platte County, Missouri, resulting in the release of approximately 5,000 barrels of ethane-propane mixture. The released product ignited and caused a fire. The cause of the failure was determined to be external near-neutral stress corrosion cracking along and adjacent to an HF-ERW seam.

- The failed segment of the East Leg Loop Pipeline is currently shut-in and not operating.
- The investigation of the Failure is on-going, and information could change. These preliminary findings may be amended based on further findings during the investigation.

Determination of Necessity for Corrective Action Order and Right to Hearing

Section 60112 of title 49, United States Code, authorizes PHMSA to determine that a pipeline facility is or would be hazardous to life, property, or the environment and if there is a likelihood of serious harm, to expeditiously order the operator of the facility to take necessary corrective action, including suspended or restricted use of the facility, physical inspection, testing, repair, replacement, or other appropriate action. An order issued expeditiously must provide an opportunity for a hearing as soon as practicable after the order is issued.

In deciding whether to issue an order, PHMSA must consider the following, if relevant: (1) the characteristics of the pipe and other equipment used in the pipeline facility, including the age, manufacture, physical properties, and method of manufacturing, constructing, or assembling the equipment; (2) the nature of the material the pipeline facility transports, the corrosive and deteriorative qualities of the material, the sequence in which the material is transported, and the pressure required for transporting the material; (3) the aspects of the area in which the pipeline facility is located, including climatic and geologic conditions and soil characteristics; (4) the proximity of the area in which the hazardous liquid pipeline facility is located to environmentally sensitive areas; (5) the population density and population and growth patterns of the area in which the pipeline facility is located; (6) any recommendation of the National Transportation Safety Board made under another law; and (7) any other factors PHMSA may consider as appropriate.

After evaluating the foregoing preliminary findings of fact, and having considered the circumstances surrounding the Failure, the hazardous nature of the product being transported, the pressure required for transporting the material, the method of manufacture, the prior failure on the pipeline system, the uncertainties as to the cause of the Failure, the ongoing investigations to determine the cause of the Failure, and the possibility that the same condition(s) that may have caused the Failure remain present in the pipeline and could lead to additional failures, it appears that the continued operation of the pipeline without corrective measures would pose a pipeline integrity risk to public safety, property, or the environment. Accordingly, corrective measures are necessary to mitigate the pipeline integrity risk of the pipeline system to protect public safety, property, and the environment.

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

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, PHMSA, OPS Southwest Region. If a hearing is requested, it will be held in accordance with 49 CFR § 190.211.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any additional measures required and, if appropriate, PHMSA will consider amending this Order. 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

Definitions:

Affected Segment – “*Affected Segment*” means the segment of Respondent's 10-inch East Leg Loop Pipeline running from Kearney, Missouri to Iowa City, Iowa.

Isolated Segment – “*Isolated Segment*” means the segment of Respondent's 10-inch East Leg Loop Pipeline running from MP 21.6 to MP 23.3.

Failure Site – “*Failure Site*” means the pipeline section on the Affected Segment where the failure occurred on February 14, 2026.

Director – “*Director*” means the Director, PHMSA, Office of Pipeline Safety, Southwest Region. The Director’s address is 8701 South Gessner Road, Suite 630, Houston, TX 77074.

Pursuant to 49 U.S.C. 60112, Enterprise is ordered to immediately take the following corrective actions:

1. **Shutdown of the Isolated Segment.** The 10" Enterprise East Leg Loop Pipeline from MP 21.6 and MP 23.3 is currently out of service. This *Isolated Segment* must remain shut down until the Director has provided written approval to Enterprise to resume operations. The *Affected Segment* is subject to the pressure restriction set forth in Item 2 below.
2. **Operating Pressure Restriction.** Enterprise must reduce and maintain a twenty percent (20%) pressure reduction in the operating pressure on the *Affected Segment*, such that the operating pressure does not exceed eighty percent (80%) of the actual operating pressure in effect immediately prior to the Failure on February 14, 2026.
 - a. This pressure restriction is to remain in effect until written approval to increase the pressure or return the pipeline to its pre-Failure operating pressure is obtained from the Director.
 - b. Prior to resuming operation, Enterprise must provide the Director the actual operating pressures of each pump station and each main line pressure regulating station on the *Affected Segment* at the time of the Failure and the reduced pressure restriction set-points at these same locations. As portions of the *Affected Segment* may be capable of bi-directional operation, the reduced pressure pump station set-points should be specified for both directions of flow where applicable.
 - c. This pressure restriction requires any relevant remote or local alarm limits, software programming set-points or control points, and mechanical over-pressure

devices to be adjusted accordingly.

- d. When determining the pressure restriction set-points, Enterprise must take into account any in-line inspection (ILI) features or anomalies present in the *Affected Segment* to provide for continued safe operation while further corrective actions are completed. A description of how any ILI features or anomalies were accounted for in the determination of pressure restriction set-points shall be provided with the information.
 - e. Enterprise must review the pressure restriction monthly by analyzing the operating pressure data, taking into account any ILI features or anomalies present in the *Affected Segment*. Enterprise must immediately reduce the operating pressure to maintain the safe operations of the *Affected Segment*, if warranted by the monthly review. Enterprise must submit the results of the monthly review to the Director including, at a minimum, the current discharge set-points (including any additional pressure reductions), and any pressure exceedance at discharge set-points.
3. **Restart Plan.** Prior to resuming operation of the *Isolated Segment*, Enterprise must develop and submit a written Restart Plan to the Director for prior approval.
- a. The Director may approve the Restart Plan incrementally without approving the entire plan, but the *Isolated Segment* cannot resume operation until the Restart Plan is approved in its entirety.
 - b. Once approved by the Director, the Restart Plan will be incorporated by reference into this Order.
 - c. The Restart Plan must provide for adequate patrolling of the *Isolated Segment* during the restart process and must include incremental pressure increases during start up, with each increment to be held for at least two (2) hours.
 - d. The Restart Plan must include sufficient surveillance of the pipeline during each pressure increment to ensure that no leaks are present when operation of the line resumes.
 - e. The Restart Plan must specify a daylight restart and include advance communications with local emergency response officials.
 - f. The Restart Plan must also include documentation of the completion of all mandated actions, and a management of change plan to ensure that all procedural modifications are incorporated into Enterprise's operations and maintenance (O&M) procedures manual.
4. **Return to Service.** After the Director approves the Restart Plan, Enterprise may return the *Isolated Segment* to service, but the operating pressure must not exceed eighty percent (80%) of the actual operating pressure in effect immediately prior to the Failure on February 14, 2026 in accordance with Item 2 above.
5. **Removal of Pressure Restriction.** The Director may allow the removal or modification of the pressure restriction upon a written request from Enterprise demonstrating that restoring the pipeline to its pre-Failure operating pressure is justified based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies, and operating parameters of the pipeline.
6. **Mechanical and Metallurgical Testing.** Within 45 days after this Order is issued,

Enterprise must complete mechanical and metallurgical testing and failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. Mechanical and metallurgical testing must be conducted by an independent third-party acceptable to the Director and must document the decision-making process and all factors contributing to the failure. Respondent must complete the testing and analysis as follows:

- a. Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure site.
- b. Within 10 days of receipt of this Order, develop and submit the testing protocol and the proposed testing laboratory to the Director for prior approval.
- c. Prior to beginning the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow for an OPS representative to witness the testing.
- d. Ensure the testing laboratory distributes all reports whether draft or final in their entirety to the Director at the same time they are made available to Respondent.

7. Remedial Work Plan (RWP).

- a. Within 90 days after this Order is issued, Enterprise must submit a Remedial Work Plan (RWP) to the Director for prior approval.
- b. The Director may approve the RWP incrementally without approving the entire RWP.
- c. Upon approval by the Director, the RWP becomes incorporated by reference into this Order.
- d. The RWP must specify the tests, inspections, assessments, evaluations, and remedial measures Respondent will use to verify the integrity of the *Affected Segment*. It must address all known or suspected factors and causes of the Failure. Enterprise must consider the risks and consequences of another failure to develop a prioritized schedule for RWP-related work along the *Affected Segment*.
- e. The RWP must include a procedure or process to:
 - i. Identify pipe in the *Affected Segment* with characteristics similar to the contributing factors identified for the Failure.
 - ii. Gather all data necessary to review the failure history (in service and pressure test failures) of the *Affected Segment* and to prepare a written report containing all the available information such as the locations, dates, and causes of leaks and failures.
 - iii. Integrate the results of the metallurgical testing, root cause failure analysis, and other corrective actions required by this Order with all relevant pre-existing operational and assessment data for the *Affected Segment*. Pre-existing operational data includes, but is not limited to, design, 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 DCVG/ACVG surveys.

- iv. Determine if conditions similar to those contributing to the Failure are likely to exist elsewhere on the *Affected Segment*.
- v. Conduct additional field tests, inspections, assessments, and evaluations to determine whether, and to what extent, the conditions associated with the Failure and other failures from the failure history (see (e)(ii) above) or any other integrity threats are present elsewhere on the *Affected Segment*. At a minimum, this process must consider all failure causes and specify the use of one or more of the following:
 - 1) ILI tools that are technically appropriate for assessing the pipeline system based on the cause of Failure and that can reliably detect and identify anomalies,
 - 2) Hydrostatic pressure testing,
 - 3) Close-interval surveys,
 - 4) Cathodic protection surveys, to include interference surveys in coordination with other utilities (e.g., underground utilities, overhead power lines, etc.) in the area,
 - 5) Coating surveys,
 - 6) Stress corrosion cracking surveys,
 - 7) Selective seam corrosion surveys; and
 - 8) Other tests, inspections, assessments, and evaluations appropriate for the failure causes.

Note: Enterprise may use the results of previous tests, inspections, assessments, and evaluations if 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.

- vi. Describe the inspection and repair criteria Enterprise 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.
 - vii. Based on the known history and condition of the *Affected Segment*, describe the methods Enterprise will use to repair, replace, or take other corrective measures to remediate the conditions associated with the Failure, and to address other known integrity threats along the *Affected Segment*. The repair, replacement, or other corrective measures must meet the criteria specified in (e)(vi) above.
 - viii. 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 Order.
- f. Enterprise must include a proposed schedule for completion of the RWP.
 - g. Enterprise must revise the RWP as necessary to incorporate new information obtained during the failure investigation and remedial activities, to incorporate

the results of actions undertaken pursuant to this Order, and/or to incorporate modifications required by the Director.

- i. Enterprise must submit any plan revisions to the Director for prior approval.
 - ii. The Director may approve plan revisions incrementally.
 - h. Enterprise must implement the RWP as it is approved by the Director, including any revisions to the plan.
8. **Root Cause Failure Analysis.** Within 90 days after this Order is issued, Enterprise must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be facilitated by an independent third-party approved by the Director. Enterprise must ensure that all reports, whether draft or final, are made available in their entirety to the Director at the same time they are made available to Enterprise. The final report must include findings and any lessons learned and whether the findings and lessons learned are applicable to other locations within Enterprise's pipeline system.

Other Requirements:

9. **Approvals.** With respect to each submission under this Order that requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent 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 the submission, Respondent must correct all deficiencies within the time specified by the Director and resubmit it for approval.
10. **Extensions of Time.** The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.
11. **Reporting.** Submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report is due on March 1, 2026. The Director may change the interval for the submission of these reports.
12. **Documentation of the Costs.** It is requested that Respondent maintain documentation of the costs associated with implementation of this Order. Include in each monthly report submitted, 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.

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).

In your correspondence on this matter, please refer to “CPF No. 4-2026-005-CAO” and for each document you submit, please provide a copy in electronic format whenever possible. The actions required by this Order are in addition to and do not waive any requirements that apply to Respondent’s pipeline system under 49 CFR Parts 190 through 199, under any other order issued to Respondent under authority of 49 U.S.C. Chapter 601, 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.

Failure to comply with this 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.

The terms and conditions of this Order are effective upon service in accordance with 49 CFR § 190.5.

Linda Daugherty
Acting Associate Administrator
for Pipeline Safety

Date Issued