



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

1200 New Jersey Avenue, SE  
Washington, DC 20590

January 17, 2026

**VIA ELECTRONIC MAIL TO: [brian.mundt@nngco.com](mailto:brian.mundt@nngco.com)**

Brian Mundt  
President/CEO  
Northern Natural Gas Company  
1111 South 103rd Street  
Omaha, Nebraska 68124

**Re: CPF No. 3-2026-002-CAO**

Dear Mr. Mundt,

Enclosed please find a Corrective Action Order (CAO or Order) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS). The CAO requires Northern Natural Gas Company (NNG) to take certain corrective actions with respect to the pipeline failure that occurred on January 16, 2026, on the 20-inch M440B pipeline approximately two miles west of Willow River, Minnesota.

Service of the CAO 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 GAIL  
DAUGHERTY** Digitally signed by LINDA  
GAIL DAUGHERTY  
Date: 2026.01.17 18:23:51  
-05'00'

Linda Daugherty  
Acting Associate Administrator  
for Pipeline Safety

Enclosure: CAO

cc: Mr. David Barrett, Acting Director, Central Region, Office of Pipeline Safety, PHMSA

**CONFIRMATION OF RECEIPT REQUESTED**

<sup>1</sup> NNG operates the largest interstate natural gas pipeline system in the United States, with 14,300 miles of pipe extending from the Permian Basin in Texas to the Upper Peninsula of Michigan. NNG accesses supply from every major Mid-Continent basin, as well as the Permian, Rocky Mountain and Western Canadian basins. This supply is ultimately delivered to end-use customers in Minnesota, Iowa, Nebraska, South Dakota, Wisconsin, Illinois, and the Upper Peninsula of Michigan. NNG also operates three underground natural gas storage (UNGS) facilities and two liquefied natural gas (LNG) peaking units.

- On January 16, 2026, at approximately 2:00 pm CDT, the M440B pipeline ruptured approximately 2 miles west of Willow River, MN. The released natural gas caught fire in two locations approximately 1,000 feet apart at each end of the failed pipe.
- The Respondent initiated efforts to contain the release by closing valves to isolate the Failure.
- The Failure occurred in a rural area and did not result in any fatalities, or injuries. Three homes were evacuated, and the residents were allowed to return home later in the day.
- NNG notified the National Response Center (NRC) of the Failure on January 16, 2026, at approximately 3:30 pm (NRC Incident Report # 1452887).
- PHMSA and the Minnesota Office of Pipeline Safety (MNOPS) launched an onsite investigation and investigators arrived at the site of the Failure on January 16, 2026.
- PHMSA and MNOPS investigators at the site saw the ruptured pipeline and observed that approximately 1,000 feet of pipe had self-excavated during the rupture.
- The pipe at the Failure location is 20-inch diameter pipe manufactured in 1959 with API 5L X52 low frequency electric resistance welded (LF-ERW) longitudinal seam manufactured by Youngstown. LF-ERW pipe of this vintage is known to be susceptible to integrity issues.
- In 2021, NNG ran inline inspection (ILI) tools through the M440B pipeline at the location of the Failure, including magnetic flux leakage (MFL), circumferential MFL, mapping tool, and a pipe grade tool.
- The maximum allowable operating pressure (MAOP) of the pipe at the Failure site is 1,050 pounds per square inch gauge (psig). The operating pressure at the time of the Failure was approximately 1,016 psig.
- NNG indicated to PHMSA and MNOPS investigators that the Failure resulted in the estimated release of approximately 63 MMcf of natural gas.
- Three nearby towns lost natural gas service following the Failure with approximately 830 customers being affected

### **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 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 characteristics of the pipeline, the nature of the failure; the hazardous nature of the material transported; the existing and potential additional impacts to property, the environment, and wildlife; it is hereby determined that continued operation of the *Affected Segment* of the NNG M440B pipeline, as defined below, without corrective measures is or would be hazardous to life, property, or the environment, and that failure to issue this Order expeditiously would result in the likelihood of serious harm.

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 completion of service.

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 Central 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 a further amended 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.

### **Definitions**

***Affected Segment*** – The “Affected Segment” means the 20-inch diameter, M440B pipeline from the North Branch Compressor Station (M.P. 0) to Carlton Compressor Station (MP 85.67).

***Isolated Segment*** – The “Isolated Segment” means the 20-inch diameter M440B pipeline from MP 43 to MP 57.

***Failure Segment*** – The Failure Segment means the approximately 1,000 feet of pipe (MP 53.88 to 54.6) that ruptured on January 16, 2026.

**Director** – The “Director” means the Director, PHMSA, OPS Central Region.

1. **Restart Plan.** Prior to resuming operation of the Isolated Segment, NNG must develop and submit a written Restart Plan to the Director for prior approval. The Restart Plan may be submitted in incremental stages.
  - a. The Restart Plan must include a Repair Plan for the Director’s approval. The Repair Plan may include short-term provisions to operate portions of the Isolated Segment at reduced pressure outside the limits of the Failure Segment to provide natural gas service to local communities supplied within the Isolated Segment while completing repairs within the Failure Segment. Any short-term operating provisions within the Repair Plan must specify pressure limits within the Isolated Segment while completing repairs.
  - b. The Director may approve the Restart Plan incrementally, including the Repair Plan, without approving the entire plan.
  - c. Once approved by the Director, the Restart Plan will be incorporated by reference into this Order.
  - d. The Restart Plan must provide for adequate patrolling and sufficient surveillance of the Isolated Segment during the restart process to ensure that no leaks are present when operation of the line resumes.
  - e. The Restart Plan must specify a day-light restart and include advance communications with local emergency response officials.
2. **Operating Pressure Restriction.** NNG must reduce and maintain a twenty percent (20%) pressure reduction in the actual operating pressure along the entire length of the Affected Segment, such that the operating pressure along the Affected Segment will not exceed eighty percent (80%) of the actual operating pressure in effect immediately prior to the failure on January 16, 2026.
  - a. This pressure restriction must 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. Within 10 days of issuance of the Order, NNG must provide the Director the actual operating pressures of each compressor station and each main line pressure regulating station on the Affected Segment at the time of failure and the reduced pressure restriction set-points at these same locations.
  - 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, NNG 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.
  - e. NNG must review the pressure restriction monthly by analyzing the operating pressure data. NNG must take into account any ILI features or anomalies present in the Affected Segment and immediately reduce the operating pressure to maintain the safe operations of the Affected Segment, if warranted by the monthly review. NNG must submit the results of the monthly review to the Director. The results must include, at a minimum, the current discharge set-points (including any additional pressure reductions), and any pressure exceedance at discharge set-points.

- f. NNG may request approval from the Director to increase the operating pressure on individual segments on the Affected Pipeline based on an engineering analysis or other justification that the segment does not pose a safety risk.
3. **Mechanical and Metallurgical Testing.** Within 45 days of receipt of this Order, NNG must complete mechanical and metallurgical testing and failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. 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 NNG.
4. **Root Cause Failure Analysis.** Within 90 days following receipt of this Order, NNG 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 NNG's pipeline system. The independent third-party must distribute all RCFA reports (whether draft or final) in their entirety to the Director at the same time they are made available to NNG provide all versions of the RCFA
5. **Remedial Work Plan (RWP).**
- a. Within 120 days following receipt of this Order, NNG 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 Order.
  - d. The RWP must specify the tests, inspections, assessments, evaluations, and remedial measures NNG will use to verify the integrity of the Affected Segment. It must address all known or suspected factors and causes of the January 16, 2026 failure. NNG must consider both the risk of another failure and the consequence 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 January 16, 2026 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, RCFA, 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, 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 on January 16, 2026, are likely to exist elsewhere on the Affected Segment.
- v. Conduct additional field tests, inspections, assessments, and/or evaluations to determine whether, and to what extent, the conditions associated with the failure on January 16, 2026, 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 on January 16, 2026, 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: NNG 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 January 16, 2026 failure.

- vi. Describe the inspection and repair criteria NNG 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. Describe the methods NNG will use to repair, replace, or take other corrective measures to remediate the conditions associated with the pipeline failure on January 16, 2026, and to address other known integrity threats along the Affected Segment. The repair, replacement, or other corrective measures must meet the criteria specified in [1(d)(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. Include a proposed schedule for completion of the RWP.
  - g. NNG 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. 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 Order will be fully described and documented in the CAO Documentation Report (CDR).
  - h. Implement the RWP as it is approved by the Director, including any revisions to the plan.
- 6. **CAO Documentation Report (CDR).** NNG must create and revise, as necessary, a CAO Documentation Report (CDR). When NNG has concluded all the items in this 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 NNG with regards to this Order prior to approving the closure of this Order. The intent is for the CDR to summarize all activities and documentation associated with this 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 Order.
  - c. The CDR must include but not be limited to:
    - i. Table of Contents;
    - ii. Summary of the pipeline failure of January 16, 2026, and the response activities;
    - 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 the Order;
    - v. Summary of the Mechanical and Metallurgical Testing as required by the Order;
    - vi. Summary of the RCFA with all root causes as required by the Order;
    - vii. Documentation of all actions taken by NNG 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 Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities;
    - ix. Lessons learned while completing this Order;
    - x. A path forward describing specific actions NNG will take on its entire pipeline system as a result of the lessons learned from work on this Order; and
    - xi. Appendices (if required).

**Other Requirements:**

- 7. **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.
- 8. **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.



9. **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 April 30, 2026, covering the period through March 31, 2026. The Director may change the interval for the submission of these reports.
10. **Documentation of the Costs.** It is requested that Respondent maintain documentation of the costs associated with implementation of this CAO. 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, if applicable.

Be advised that all material submitted 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. 3-2026-002-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 GAIL**  
**DAUGHERTY**  
Digitally signed by  
LINDA GAIL DAUGHERTY  
Date: 2026.01.17  
18:25:00 -05'00'

January 17, 2026

Linda Daugherty  
Acting Associate Administrator  
for Pipeline Safety

Date Issued