



DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA-2026-1585]

Pipeline Safety: Advisory Bulletin on Preventing Excavation Damage During National Safe Digging Month and Beyond

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

ACTION: Notice; issuance of advisory bulletin.

SUMMARY: PHMSA is issuing this advisory bulletin to all owners and operators of gas and hazardous liquid pipeline facilities to highlight the critical importance of excavation damage prevention during periods of significant infrastructure growth. This bulletin emphasizes the need for adherence to the Common Ground Alliance best practices, accurate and timely locating, and proactive coordination with excavators to prevent pipeline strikes. As April marks National Safe Digging Month, PHMSA encourages operators to reinforce safety protocols to protect the public and ensure the continued safe transportation of energy resources that drive American economic prosperity.

FOR FURTHER INFORMATION CONTACT: Owners and operators of pipelines subject to regulation by PHMSA should contact the appropriate PHMSA Region Office. The PHMSA Region Offices and their contact information are as follows:

- **Eastern Region:** 609-771-7800 (CT, DE, DC, ME, MD, MA, NH, NJ, NY, OH, PA, RI, VT, VA, WV)
- **Southern Region:** 404-832-1147 (AL, FL, GA, KY, MS, NC, PR, SC, TN)
- **Central Region:** 816-329-3800 (IL, IN, IA, KS, MI, MN, MO, NE, ND, SD, WI)
- **Southwest Region:** 713-272-2859 (AR, LA, NM, OK, TX)

- **Western Region:** 720-963-3160 (AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY)

Owners and operators of intrastate pipelines should contact the appropriate State pipeline safety authority. A list of State pipeline safety authorities is available at www.napsr.org.

SUPPLEMENTARY INFORMATION:

Excavation damage remains one of the leading causes of pipeline incidents and accidents involving injuries, fatalities and property damage. Since 2005, there have been over 875 excavation-related pipeline incidents and accidents resulting in 40 fatalities, 166 serious injuries, and approximately \$322,000,000 in property damage. When accounting for all utility types, the estimated annual cost to the U.S. economy is nearly \$30 billion.

Based on the latest PHMSA data for 2025, there was a total of 85,606 excavation damages to gas distribution facilities across 35,813,977 excavation tickets nationwide, resulting in an overall average of 2.39 damages per thousand tickets. For this same data, excavator-related issues are the most frequent root cause, accounting for 33,609 damages, which is approximately 39.3 percent of the total. One-call notification issues are the second-most common cause with 29,472 damages, followed by locating issues at 20,305 damages.

Despite measurable improvements in safety performance and 811 “Before You Dig” awareness programs over recent decades—largely driven by enhanced preventative measures, regulatory oversight, and mitigation practices, owners and operators of pipeline facilities continue to experience excavation-related incidents and accidents, particularly during times of economic growth and infrastructure expansion.

I. Excavation-Related Safety Threats

- *High-Density Excavation Activity.* The rapid deployment of fiber optics and other underground utilities often creates “congested corridors.” PHMSA is aware of a trend where the volume of 811 tickets can overwhelm local locating capacities, leading to delays or inaccuracies in marking.

- *Inaccurate Locating and Records Management.* Recent incidents, such as the 2025 explosion in Lexington, MO, underscore the danger of improperly marked or "unmapped" facilities. In that event, a strike on a capped gas main during a drilling project resulted in a tragic loss of life and severe injuries. These events are often the result of relying on legacy records that do not accurately reflect modern field conditions.
- *Improper Excavation Techniques.* Failure to use non-destructive excavation methods, such as hand digging or vacuum excavation (potholing) within the tolerance zone, continues to be a primary factor in mechanical damage to pipeline coatings and steel.
- *One-Call Exemptions.* In CY 2024, one State had more than 2,000 excavation damages where there was no legal requirement to call 811 when excavating above 16 inches. In 2025, an operator's interstate pipeline was struck when a contractor was leveling an area to pour a concrete parking lot. The contractor did not anticipate digging beyond 16 inches and therefore did not make a line locate request. The total estimated release volume of crude oil was 2,363 barrels.
- *Shallow Pipelines.* Pipelines that have a shallow depth of cover may pose an additional risk of being impacted by excavation depending on their location. Recent incidents and accidents highlight that when pipelines are in areas subject to agriculture tilling practices, they remain at greater risk of being struck if the depth of coverage is not maintained. Similarly, shallow pipelines in urban areas may be at greater risk due to routine residential activities. Adding to this risk is the fact that some States may exempt the need for one-call notification for shallow excavations.
- *Industrial Activities.* Most pipeline rights-of-way (ROW) are not secured. The landowners or tenants may conduct activities that are detrimental to the pipeline assets within the ROW. In 2025, an interstate pipeline transporting natural gas ruptured due to latent excavation damage. The pipeline transected a recycling center that used heavy

equipment. Evidence suggests that the equipment struck the pipeline. In 2023, an intrastate natural gas pipeline transecting a cattle feedlot was struck by a wheel loader while performing routine maintenance. The pipeline ruptured and injured the operator of the wheel loader.

II. Advisory Bulletin (ADB-2026-05)

To: Owners and Operators of Gas and Hazardous Liquid Pipeline Facilities.

Subject: Pipeline Safety: Protecting Pipeline Integrity Through Enhanced Damage Prevention and Coordination.

Advisory: In observance of National Safe Digging Month, owners and operators are advised to consider implementing the following measures:

- *Adopt CGA Best Practices:* Fully integrate the Common Ground Alliance (CGA) Best Practices into standard operating procedures, specifically focusing on Practice 4-11 (Accuracy of Locating) and Practice 5-23 (Rapid Response to Strikes).
- *Enhance Locator Training and Oversight:* Ensure that both internal and contract locators have the tools and time necessary to provide accurate markings. Conduct periodic audits of locator performance in high-growth areas.
- *Proactive "White Lining" and Pre-Construction Meetings:* Encourage or require excavators to "white line" proposed dig areas. For large-scale projects, conduct pre-construction meetings to discuss pipeline depth, pressure, and emergency contact protocols.
- *Public Awareness Campaigns:* Leverage the 811 "Before You Dig" message in community outreach. Emphasize that the new jobs and infrastructure currently being built are only as secure as the safety practices used to install them. Consider implementing communication strategies that deliver clear, actionable guidance on recognizing and responding to pipeline releases; expanding outreach beyond traditional methods to better reach affected populations; establishing performance measures to evaluate program

effectiveness; and incorporating continuous improvement practices informed by incident data, stakeholder feedback, and lessons learned. Strengthening public awareness programs in this manner can improve stakeholder understanding and help mitigate the consequences of excavation-related incidents. Operators should also consider raising public awareness of the increased risk presented in States with exemptions or one-call exclusions.

- *Verify Integrity After Near-Misses*: If a pipeline is struck or scraped, even if no leak is detected, perform a thorough inspection of the pipe and coating. Latent damage can lead to future stress corrosion cracking or delayed failure.
- *Patrols and Public Awareness*: Patrols should inform operators of excavation activities that may impinge on pipeline ROWs. Operators should act quickly to follow up on any observed impingements to ensure that the excavation activity does not pose a threat to the pipeline.

III. Regulatory Oversight

Owners and operators are reminded that under 49 CFR 192.613 and 195.401, they must have a procedure for continuing surveillance of their facilities. Managing the risks associated with third-party excavation is a critical component of these regulatory requirements.

PHMSA notes that this advisory bulletin does not have the force and effect of law and is not meant to bind owners, operators, or the public in any way.

Issued in Washington, D.C., under authority delegated in 49 CFR 1.97.

Linda Daugherty,

Acting Associate Administrator for Pipeline Safety.