BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

In the Matter of the Proposed Amendments to the Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11.	)	**Proceeding No. 25R-0280GPS**

APPLICATION OF ENVIRONMENTAL DEFENSE FUND FOR REHEARING, REARGUMENT, OR RECONSIDERATION OF DECISION NO. C26-0065

February 18, 2025

Table of Contents

INTRODUCTION

Pursuant to Colo. Rev. Stat. § 40-6-114 and 4 C.C.R. § 723-1-1506, Environmental Defense Fund ("EDF") respectfully files this Application for Rehearing, Reargument, or Reconsideration ("RRR") of the Colorado Public Utilities Commission's ("Commission") Decision No. C26-0065, issued on January 29, 2026 ("Decision"). The Colorado Legislature directed the Commission, in HB25-1280, to adopt rules for the use of advanced leak detection technologies that "meet the need for pipeline safety and protection of the environment" by November 1, 2025.[1] The Commission has worked diligently to implement this mandate, resulting in the issuance of Temporary Rules in October 2025 and a Decision and Final Rule in January 2026.[2]

Key elements of the Decision, however, fail to ensure the use of effective advanced leak detection technologies for all regulated pipeline types to meet the need for pipeline safety and protection of the environment. Indeed, for distribution pipelines, the Decision's definition of advanced leak detection technologies is so lax that it would miss the vast majority of leaks on the approximately 59,000 miles of distribution pipelines under the Commission's jurisdiction, even though there is commercially available technology to detect these leaks. This is because the definition only requires operators to use *either:* (1) advanced technology at a level that cannot detect leaks of the size commonly known to occur on distribution pipelines; *or* (2) technology

[1] H.B. 25-1280, 75th Gen. Assemb., Reg. Sess. (Colo. 2025) https://leg.colorado.gov/bills/hb25-1280; C.R.S. § 40-2-115(1)(d)(II)(E); C.R.S. § 40-2-115(1)(g).

[2] *In the Matter of the Temporary Rules Implementing Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11*, CO PUC Proceeding No. 25R-0455GPS, Decision No. C25-0784, Commission Decision Adopting Temporary Rules (Oct. 31, 2025); *In the Matter of the Proposed Amendments to the Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11*, CO PUC Proceeding No. 25R-0280GPS, Commission Decision Addressing Exceptions to Decision No. R25-0735 and Adopting Rules (Jan. 29, 2026) [hereinafter Commission Decision]; Commission Decision Addressing Exceptions to Decision No. R25-0735 and Adopting Rules, Attachment A—Adopted Rules in Legislative Format (Jan. 29, 2026) [hereinafter Final Rule].

that has been available for decades and, while able to find many leaks, is not advanced at identifying the greatest number of leaks and quantifying their flow rate. Further, contrary to the express direction of the Legislature, the Decision's prioritization of leaks for repair considers only safety and not the need for both safety and environmental protection.

EDF respectfully requests that the Commission reconsider and modify its Decision to (1) strengthen the definition of "advanced leak detection technology" to ensure that qualifying equipment is capable of detecting most leaks on each pipeline type, including distribution lines, and (2) require operators to mitigate environmental harm—not just safety risks—when prioritizing leaks for repair, by incorporating consideration of environmental impacts into the leak grading standards.

Natural gas pipeline losses are harmful to the environment and human health, pose a safety risk to the nearby public, and result in economic waste that is costly to customers. Natural gas is primarily composed of methane, a potent greenhouse gas that contributes to climate change, which is driving rising temperatures, continuing reductions in snowpack, more frequent and intense droughts, and more and larger wildfires for Coloradans.[3] The Commission must strengthen its leak detection and repair standards for gas pipelines to fulfill its statutory mandate and advance the public interest by reducing air and climate pollution, improving safety, and reducing economic waste.

EDF provides proposed redlines to fulfill these objectives at the bottom of this submission.

[3] *See* Colorado Energy Office, *Colorado Greenhouse Gas Pollution Reduction Roadmap 2.0* (Feb. 2024), https://energyoffice.colorado.gov/ghg-pollution-reduction-roadmap; *In the Matter of the Proposed Amendments to the Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11*, CO PUC Proceeding No. 25R-0280GPS, Comments of Environmental Defense Fund on the June 30, 2025 Notice of Proposed Rulemaking at 5-6 (July 22, 2025) [hereinafter "EDF Initial Comments"].

BACKGROUND

The Commission issued a Notice of Proposed Rulemaking on June 30, 2025 to update its leak detection and repair standards for natural gas distribution, transmission, and a subset of gathering pipelines ("Proposed Rule").[4] EDF engaged throughout the rulemaking, filing initial and responsive comments in July, participating in a rulemaking hearing, and filing post-hearing comments in August.[5] On October 15, 2025, presiding Administrative Law Judge Garvey issued a Recommended Decision and Adopted Rules ("Recommended Decision").[6] On October 31, 2025, the Commission issued a decision temporarily adopting the Adopted Rules.[7] On November 4, 2025, Joint Environmental Commenters, including EDF, submitted Exceptions to the Recommended Decision and Adopted Rules ("Joint Environmental Exceptions"), [8] as did a variety of other stakeholders.[9] On November 18, 2025, Joint Environmental Commenters, including EDF, submitted responses to the Exceptions of other parties and requested that the

[4] *In the Matter of the Proposed Amendments to the Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11*, CO PUC Proceeding No. 25R-0280GPS, Decision No. C25-0489, Notice of Proposed Rulemaking (June 30, 2025) [hereinafter Notice of Proposed Rulemaking].
[5] EDF Initial Comments at Part II; CO PUC Proceeding No. 25R-0280GPS, Responsive Comments of Environmental Defense Fund on the June 30, 2025 Notice of Proposed Rulemaking (July 29, 2025) [hereinafter "EDF Responsive Comments"]; CO PUC Proceeding No. 25R-0280GPS, Comments of Environmental Defense Fund on the June 30, 2025 Notice of Proposed Rulemaking and August 5, 2025 Rulemaking Hearing (August 15, 2025) [hereinafter "EDF Post-Hearing Comment"].
[66] *In the Matter of the Proposed Amendments to the Rules Regulating Pipeline Operators and Gas Pipeline Safety, 4 Code of Colorado Regulations 723-11*, CO PUC Proceeding No. 25R-0280GPS, Decision No. R25-0735, Recommended Decision Adopting Rules (Oct. 15, 2025).
[7] CO PUC Proceeding No. 25R-0455GPS, Decision No. C25-0784, Commission Decision Adopting Temporary Rules (Oct. 31, 2025).
[8] CO PUC Proceeding No. 25R-0280GPS, Exceptions of Environmental Defense Fund, 350 Colorado, Earthworks, Citizens for a Healthy Community, Western Colorado Alliance, and GreenLatinos to Recommended Decision R25-0735 (Nov. 4, 2025) [hereinafter "Joint Environmental Exceptions"].
[9] CO PUC Proceeding No. 25R-0280GPS, Public Service Company of Colorado's Exceptions to Recommended Decision No. R25-0735 (Nov. 4, 2025); Exceptions of Black Hills Colorado Gas, Inc. to Recommended Decision No. R25-0735 (Nov. 4, 2025); Atmos Energy Corporation's Exceptions to Recommended Decision No. R25-0735 (Nov. 4, 2025); Exceptions to Recommended Decision by American Petroleum Institute (Nov. 4, 2025).

Commission hear oral argument.[10] At its December 23, 2025 public meeting,[11] the Commission discussed the Recommended Decision, ruled on parties' Exceptions, and denied the request for oral argument.[12] On January 29, 2026, the Commission issued Decision No. C26-0065 and Final Rule,[13] granting in part and denying in part the Joint Environmental Exceptions.

In its Decision, the Commission updated its gas pipeline leak detection and repair standards with several key components: (1) the applicability of leak detection requirements to certain types of pipelines; (2) the requirement that operators use advanced leak detection technology when conducting leak surveys (Rule 11209); (3) a definition of advanced leak detection technology that sets a minimum sensitivity level for qualifying equipment (Rule 11101(a)); and (4) leak grading rules on determining which leaks must be prioritized for repair and what timeframes within which operators must repair leaks based on their severity (Rule 11210).

Regarding applicability of standards, the Commission remedied the Recommended Decision's erroneous conclusion that Type R gas gathering pipelines are under the "explicit jurisdiction" of the federal government.[14] Though the Commission declined to adopt leak

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[10] CO PUC Proceeding No. 25R-0280GPS, Response to Exceptions to Recommended Decision R25-0735 and Motion for Oral Argument of 350 Colorado, Citizens for a Healthy Community, GreenLatinos, Earthworks, Environmental Defense Fund, and Western Colorado Alliance (Nov. 18, 2025) [hereinafter "Joint Environmental Response to Exceptions"].

[11] C.R.S. § 24-6-402.

[12] Colorado Public Utilities Commission, *CWM – December 23, 2025- HRA,* https://www.youtube.com/watch?v=fuvZ6AomRDU&t=8041s (Dec. 23, 2025).

[13] Commission Decision; Final Rule.

[14] Recommended Decision at 14. The Pipeline and Hazardous Materials Safety Administration ("PHMSA") groups gathering pipelines into four regulatory categories—Type A, B, C, and R—based on distinct physical characteristics of the pipeline and their proximity to populated areas. Type R gathering pipelines are characterized by their small diameter (<8.625 inches) and remote location (Class 1). Current federal standards require Type A, B, and a subset of C gathering pipelines to conduct leak surveys and repairs, whereas Type R pipelines are only subject to reporting requirements. Operators in Colorado reported over 8,000 miles of Type R pipelines in 2024, an approximately 1,000-mile increase from just two years prior. *See* PHMSA, *Gas Distribution, Gas Gathering, Gas Transmission, Hazardous Liquids, Liquified Natural Gas (LNG), and Underground Natural Gas Storage (UNGS) Annual Report Data,* "Report-Regulated Gas Gathering (RRGG) Annual Data – 2022 to present (ZIP)" (last accessed Feb. 11, 2026), https://www.phmsa.dot.gov/data-and-statistics/pipeline/gas-distribution-gas-gathering-gas-transmission-hazardous-liquids (data for 2025 is forthcoming).

detection and repair standards for Type R pipelines in this proceeding, the Decision clarified that the Commission views Type R pipelines as "outside the scope of this rulemaking proceeding."[15] The Commission's Decision appropriately avoids expounding on issues regarding its scope of authority that are not necessary to reach in this proceeding.

ARGUMENT

The Decision does not satisfy the Legislature's clear directive to adopt standards requiring the use of advanced leak technology in gas pipeline leak detection and repair to "meet the need for pipeline safety and protection of the environment," because the Final Rule does not require the use of sufficiently sensitive commercially-available technology on distribution pipelines.[16] Further, the Final Rule does not require operators to prioritize the most environmentally harmful leaks for repair, which is inconsistent with the statutory directive to advance both safety and environmental protection. Thus, the Decision constitutes an "unlawful" and "unwarranted" action that should be amended.[17]

A. The Leak Detection Technology Standard Does Not Ensure Adequate Identification of Leaks on Distribution Pipelines and Effectively Exempts Distribution Operators from Using "Advanced" Technology (Rule 11001(a))

A clear definition of advanced leak detection technology that captures the best commercially available solutions is critical to meaningfully improve pipeline leak mitigation. And, logically, the best solution to find leaks on a certain type of pipeline will depend on the profile of leaks that exist—including the size of the leaks and the type of setting where leaks are located. The definition of "advanced leak detection technology" in the Final Rule falls far short for distribution pipelines, because it requires operators to use *either* technology that cannot detect

[15] Commission Decision at 19.
[16] C.R.S. § 40-2-115(1)(d)(II)(E).
[17] C.R.S. § 40-6-114(1), (3).

leaks of the size commonly known to occur on distribution pipelines; *or* technology that has been available for decades and, while able to find many leaks, is not advanced at identifying the greatest number of leaks and quantifying their flow rate.

Throughout this rulemaking, the Commission and presiding ALJ proposed and ultimately adopted different iterations of the technology standard, demonstrated in Figure 1.

Figure 1.

Source	Advanced Leak Detection Technology Standard
Commission Proposed Rule[1.]	For all covered pipelines (distribution, transmission, and gathering): 10 kg/hr emission rate with 90% or greater probability of detection ("90%+ POD")
ALJ Recommended Decision & Adopted Rule[2.]	For leak screening surveys: For distribution pipelines: 5 kg/hr, 90%+ POD For transmission and gathering pipelines: <20 kg/hr, 90%+ POD
Commission Decision & Final Rule[3.]	For leak screening surveys, applicable to all covered pipelines (distribution, transmission, and gathering): 10 kg/hr with 90%+ POD, minimum flowrate detection threshold for technology using infrared or laser-based leak detection equipment; mobile, aerial, or satellite-based platforms; or fixed continuous monitoring systems must have a minimum flowrate detection 5 parts per million ("ppm") for technology using handheld leak detection equipment or equipment mounted on ground vehicles
EDF and Joint Environmental Commenters' Recommendation[4.]	For leak screening surveys: For distribution pipelines: 0.2 kg/hr (~10 standard cubic feet per hour (scf/hr)) emission rate with 90%+ POD For transmission and gathering pipelines: 3 kg/hr emission rate with 90% +POD for screening surveys of transmission and gathering pipelines. For leak identification surveys, applicable to all covered pipelines: 5 ppm using handheld or vehicle-mounted equipment

1. Proposed Rule at 11-12, proposed Section 11001(a).
2. Recommended Decision at 11.
3. Decision at 8, Section 11001(a).
4. EDF Initial Comments at 29.

While the Commission stated that it sought to incorporate the concerns raised by EDF and other stakeholders in Exceptions,[18] the Decision misses the mark in the level of stringency necessary to comply with law. Throughout this rulemaking, EDF and the Joint Environmental Commenters have unambiguously called for technology standards that (1) are appropriately tailored to pipeline type, in light of the variations in leak profiles on different types of pipeline infrastructure; *and* (2) ensure the use of both newer advanced technologies that can identify more leaks and rapidly quantify leak flow rates, in addition to legacy concentration-based technologies that are commonly used to confirm leak location.[19] In order to fulfill the Legislature's clear direction to the Commission, achieving each of these criteria is necessary – yet the Decision achieves neither.

The Decision effectively exempts the approximately 59,000 miles of distribution pipelines under the Commission's jurisdiction from use of advanced leak detection technology to find more leaks, as operators are required to use either 10 kg/hr technology or legacy 5 ppm technology.[20]

1. For Flow Rate Technology, a 10 Kg/Hr Standard Will Not Identify Distribution Pipeline Leaks

Legacy gas leak detection technology focused on concentration-based instruments; but through recent advancements, instruments can quantify the flow rate of a leak, or the volume of gas being emitted per unit of time. Because different pipeline categories have different

[18] Commission Decision at 7 ("We agree with the concept of technology-based sensitivity thresholds, proposed on exceptions by PST, the Local Governments, and the Joint Environmental Commenters. Sensitivity thresholds are more important for considering technology type application rather than limiting a particular technology to a pipeline type.").
[19] EDF Initial Comments at 29; EDF Responsive Comments at 5-6; EDF Post-Hearing Comments at 5; Joint Environmental Exception at 9-12; EDF Response to Exceptions at 8-10.
[20] *See* PHMSA, *Gas Distribution, Gas Gathering, Gas Transmission, Hazardous Liquids, Liquified Natural Gas (LNG), and Underground Natural Gas Storage (UNGS) Annual Report Data,* "Gas Distribution Annual Data – 2010 to present" (last accessed Feb. 11, 2026), https://www.phmsa.dot.gov/data-and-statistics/pipeline/gas-distribution-gas-gathering-gas-transmission-hazardous-liquids.

characteristics—see Figure 2—they have different leak distributions and sizes, and the appropriate minimum leak flow rate detection threshold is different for each.

Figure 2.[21]

Category of Pipeline	Relative operating pressure	Diameter	System Complexity
Gathering	Medium	Medium	Medium
Transmission	High	Large	Low
Distribution	Low	Small	High

Table 1. Relative ranking of the different categories of pipeline

In unrebutted emissions simulation modeling in the record conducted with the Fugitive Emissions Abatement Simulation Tool ("FEAST")—which relies on pipeline leak data from peer-reviewed studies— the baseline annual fugitive methane emissions were estimated for a representative 100-mile pipeline network of each pipeline category. For distribution pipelines, the baseline was over 14 tons of CO2-equivalent (CO2-e) emissions per year per 100 miles. For gathering pipelines, the baseline was nearly 150 tons CO2-e per year per 100 miles.[22] This distinction is because gathering pipelines—which are larger diameter, higher pressure pipelines—have been found to have much larger super-emitting leaks than distribution pipelines.[23]

Local distribution pipeline systems are characterized by larger numbers of smaller leaks.[24] The FEAST-Pipeline modeling demonstrates that equipment able to detect leaks between 1 and 30 kg/hr is ineffective at detecting leaks on distribution pipelines, since most leaks on

[21] Source: EDF Initial Comments, Attachment 1: Highwood Emissions Management, *Leak detection methods for natural gas gathering, transmission, and distribution pipelines* at 11 (Jan. 2022) [hereinafter "EDF Attachment 1, Highwood Report"].
[22] *See* EDF Initial Comments, Attachment 2, Ravikumar & Strayer, *FEAST-Pipeline: Modeling Leak Detection & Repair Programs for Natural Gas Pipeline Infrastructure Using FEAST* at 13, 29 (Aug. 2023) [hereinafter "EDF Attachment 2, FEAST-Pipeline"]
[23] *See* EDF Attachment 2, FEAST-Pipeline at 26 (citing Yu et al. 2022).
[24] *See* EDF Initial Comments at 21; EDF Attachment 2, FEAST-Pipeline at 7-8 (citing Weller et al. 2020).

those systems are much smaller.[25] FEAST-Pipeline modeling also found that mobile survey technology that can detect leaks as small as 0.2 kg/hr (approximately 10 standard cubic feet per hour) would reduce fugitive methane emissions from distribution pipelines by more than half, when deployed every 3 years.[26]

Based on leak characteristics on distribution pipelines, it is clear that leak detection equipment that identifies leaks of 10 kg/hr or larger cannot be expected to identify *any* leaks on distribution pipelines. An appropriate minimum detection threshold to identify the high-emitting leaks on distribution pipeline systems is 0.2 kg/hr, or 10 scf/hr, and the Commission should adopt this standard.[27]

2. Legacy Concentration-Based 5ppm Technology Plays an Important Role, But Misses Many Leaks

The Commission adopted a technology standard for pipeline leak detection that allows operators to use either flow-rate detection technology at 10 kg/hr—which is not effective for distribution pipelines, as discussed above—or to use legacy gas concentration detection technology with a sensitivity of 5ppm. Most leak detection technologies currently in use by gas utilities are focused on identifying indications of methane leaks in the air—gas concentration—rather than measuring the rate of leakage from a component.[28] PHMSA has accurately summarized this legacy technology:

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[25] *See* EDF Initial Comments at 24; EDF Attachment 2, FEAST-Pipeline at 15-16. Colorado State University also presented data supportive of a stronger technology standard than 10 kg/hr, noting that "no study has found leaks in excess of 2 kg/h[r]" on distribution systems. CO PUC Proceeding No. 25R-0280GPS, Comments of Colorado State University at 3 (July 22, 2025) [hereinafter "CSU Initial Comments"].

[26] *See* EDF Attachment 2, FEAST-Pipeline at 21; EDF Initial Comments at 23-24.

[27] This RRR petition focuses on explaining why a more tailored technology standard is needed to ensure that operators find and fix leaks on distribution pipelines consistent with the goals of the Legislature. Previous submissions by EDF and Joint Environmental Commenters in this rulemaking have explained at length that such technology options are widely commercially available, cost effective, and in-use by leading pipeline operators around the country. *See, e.g.*, EDF Initial Comments at 11-20.

[28] *See* EDF Attachment 1, Highwood Report at 20-23; PHMSA, Proposed Rule: *Pipeline Safety: Gas Pipeline Leak Detection and Repair*, 88 Fed. Reg. 31890, 31913 (May 18, 2023) (citing the American Gas Association).

> The most common method for instrumented leakage surveys (meaning a leakage survey performed using leak detection equipment) on natural gas pipelines consists of surveys along the pipeline right-of-way with handheld leak detection equipment. A surveyor typically uses a flame ionization detector (FID), infrared gas detector, optical gas imaging (OGI) device,) or other gas detector to sample gas above a buried pipeline, inside underground structures, and possibly in the soil. Handheld equipment is used to perform most leakage surveys, and any advanced leak detection solution that does not operate directly on or over the pipeline would still require confirmation of leak indications on the ground by operator personnel with handheld equipment.
> …
> Similar equipment used in walking surveys can be mounted on cars and trucks to allow efficient surveying of pipelines with adequate road access.[29]

Reports have identified that these combustible gas detectors or "sniffers" have been around since at least the 1990s.[30] The 5 ppm sensitivity, which refers to the instrument's sensitivity to detect gas concentration in the air, represents a legacy technology that has been in use for many decades by gas pipeline operators to detect leaks, but it is not advanced leak detection technology.

Continued use of legacy concentration-based methane detection technology is useful in conjunction with advanced leak detection technology, particularly since gas utilities are deeply familiar with this technology and it is used to follow-up and confirm precise leak location, but this standard alone does not satisfy the intent of the Legislature. "Advanced leak detection technology" is commonly described as referring to more recent advances (in the last ten years or so) to find more leaks and quantify their leak flow rates.[31] EDF has consistently advocated that a layered approach using a combination of technologies can be most effective to achieve high levels of mitigation.

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[29] PHMSA, Proposed Rule: *Pipeline Safety: Gas Pipeline Leak Detection and Repair*, 88 Fed. Reg. 31890, 31914 (May 18, 2023).
[30] *See* EDF Attachment 1, Highwood Report at 23 (citing Hennigan, S. Method 21 Monitors Fugitive Emissions. 6 (1993)).
[31] *See* EDF Attachment 1, Highwood Report at 23-26 (contrasting "legacy" leak detection methods with "advanced" methods).

3. The Advanced Leak Detection Technology Standard in the Commission's Decision Does Not Fulfill the Statutory Mandate

The Commission's statutory mandate is to adopt rules for the use of advanced leak detection technology that "meet the need for pipeline safety and protection of the environment."[32] The standard in the Decision is fundamentally flawed and inconsistent with experts' recommendations for advanced leak detection regulatory frameworks—including the consensus established at the federal Gas Pipeline Advisory Committee. The Decision will result in an outcome where either operators do not implement newer advanced technologies (if they just continue to use legacy concentration-based 5ppm technology), or operators will not find leaks on distribution pipelines (if they use 10 kg/hr flow rate technology). By finalizing inadequate standards, the Decision does not meet the statutory obligation prescribed in HB25-1280 and is therefore "unlawful" and "unwarranted."[33] The Commission should reconsider the Decision and modify the Final Rule by improving the definition of "advanced leak detection technology" to 1) tailor technology standards to specific pipeline types and 2) establish a sensitivity standard that is demonstrably effective on the majority of pipelines under the Commission's jurisdiction.

This revised approach is consistent with recommendations and actions of other entities. The Gas Pipeline Advisory Committee ("GPAC"), a federal advisory committee that provides feedback to the Pipeline and Hazardous Materials Safety Administration ("PHMSA") on federal rulemakings, recommended in 2024 that the agency adopt a 0.5 kg/hr threshold for screening surveys of distribution pipelines, with follow-up identification surveys using handheld

[32] C.R.S. § 40-2-115(1)(d)(II)(E).
[33] C.R.S. § 40-6-114(1).

concertation-based technology with a sensitivity of 5 ppm.[34] Because the GPAC is historically dominated by industry perspectives, the committee's recommendation signifies industry consensus and readiness to comply with a much stronger minimum technology standard for leak detection equipment than the Commission's Final Rule of 10 kg/hr. On January 17, 2025, PHMSA issued a final rule establishing a minimum detection threshold of 0.2 kg/hr for leak surveys on distribution pipelines.[35] The PHMSA January 17, 2025 rule and the GPAC recommendations are both similar to the standard proposed by EDF in this Commission rulemaking. And, as detailed in comments filed throughout the rulemaking, leading utilities in other jurisdictions around the country implement leak management practices with the dual approach of advanced flow-rate screening surveys plus legacy concentration-based identification surveys.[36]

The Commission should reconsider and modify its advanced leak detection technology standard as follows:

- For leak screening surveys:
  - For distribution pipelines: 0.2 kg/hr (~10 standard cubic feet per hour (scf/hr)) emission rate with 90%+ POD
  - For transmission and gathering pipelines: 3 kg/hr emission rate with 90% +POD for screening surveys of transmission and gathering pipelines.
- For leak identification surveys, applicable to all covered pipelines: 5 ppm using handheld or vehicle-mounted equipment

[34] Docket Nos. PHMSA-2023-0061 & PHMSA-2024-0005, Final Combined LDAR Vote Slides at Slide 16 (Apr. 5, 2024), https://www.regulations.gov/document/PHMSA-2024-0005-0288 [hereinafter "GPAC Voting Slides"].
[35] As the Commission acknowledged in describing the importance of this rulemaking for Colorado, PHMSA's January 17, 2025 final rule was withdrawn from Federal Register publication by the current administration and is not being enforced. Notice of Proposed Rulemaking at 3, 7.
[36] *See* EDF Initial Comments at 32-33.

B. Leak Classification and Repair Requirements in the Final Rule Fail to Ensure Adequate Protection of the Environment (11210)

The Decision improperly excludes any consideration of environmental protection from the definition of leak grading. Within the Commission's leak detection and repair standards for gas pipelines, the leak grading framework determines which leaks operators will prioritize for repair, and which will go unrepaired for as long as five years. Grade 1 leaks pose the greatest safety threat and must be repaired immediately; Grade 2 leaks pose an intermediate risk and must be repaired within 12 months, and Grade 3 leaks pose a lower risk and must be repaired within 24 months (but may go unaddressed for as long as five years if the pipe segment is scheduled for abandonment).[37] By removing consideration of environmental harm from leak grading standards, the Decision allows leaks that present significant risks to the environment to go unrepaired for years.

Larger leaks are more environmentally harmful, because they result in greater methane emissions that contribute to harmful climate change. And for gathering pipelines transporting unprocessed gas, larger leaks also impose environmental harms by emitting volatile organic compounds (VOCs), including benzene.[38] Large gas leaks are also economically harmful, as they represent wasted product that customers still pay for on their monthly bills. Finally, large leaks can develop over time into safety threats, even if they do not initially pose a significant risk of causing a safety incident. Thus, repairing large leaks in a timely fashion can mitigate environmental damage, economic waste, and safety risk.

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[37] *See* EDF Initial Comments, Attachment 3, Roberts, *Methane Emissions from Colorado Natural Gas Pipeline Leaks*, EDF (July 2025).

[38] *See* EDF Initial Comments at 8 (citing U.S. EPA, *Oil and Natural Gas Sector: Emissions Standards for New, Reconstructed, and Modified Sources Review* 85 Fed. Reg. 57018, 57028 (2020) (Docket No. EPA-HQ-OAR-2017-0757)).

Leak size can be measured by leak flow rate—the measurement of the volume of lost gas over a unit of time. One benefit of advanced leak detection technologies is that they can estimate the flow rate of an identified gas leak.

The Commission's Proposed Rule defined Grade 2 leaks to include leaks with a flow rate of 5 kg/hr or greater, which would have required operators to repair such large leaks within six months of discovery.[39] In Initial Comments, EDF supported the proposed 5 kg/hr flowrate definition of Grade 2 leaks for transmission and gathering lines.[40] EDF further recommended expanding the definition of Grade 2 leaks to include leaks of 10 scf/hr (or, 0.2 kg/hr) on distribution lines, since that is the commonly applied definition of a super-emitting leak on a distribution pipeline; and expanding the definition of Grade 1 leaks to include a leak with a flowrate of 100 kg/hr on any type of pipeline, since this represents an immensely large and dangerous leak. These recommendations are aligned with GPAC recommendations to PHMSA regarding its pre-published advanced leak detection rule.[41]

In the Decision, the Commission excluded any consideration of environmental impacts in the leak grading framework and did not adopt any other standards to require the mitigation of environmentally harmful leaks. Although the *identification* of large 10 kg/hr leaks on gathering and transmission pipelines is an important first step that would be accomplished under the standards adopted in the Final Rule, that alone does not yield any environmental benefit unless operators then remediate the emissions by fixing the leak.

The Commission should reconsider its decision to not incorporate a leak flow rate into the definitions of the leak grade categories. Including flow rates in leak grading would require

[39] Notice of Proposed Rulemaking at 19; Proposed Section 11210.
[40] EDF Initial Comments at 30-31.
[41] GPAC Voting Slides at 21-22.

operators to quantify the methane emissions associated with individual leaks, and identify and prioritize those leaks that pose significant environmental harm. Specifically, the Commission should add the following components into the leak grading framework:

- Grade 1 leaks to include leaks with a flow rate of 100 kg/hr or greater
- Grade 2 leaks to include, for gathering and transmission pipelines, leaks with a flow rate of 5 kg/hr or greater
- Grade 2 leaks to include, for distribution pipelines, leaks with a leak flow rate of 0.2 kg/hr (or, 10 scf/hr) or greater.

The Colorado Legislature required the Commission to adopt rules that "meet the need for pipeline safety and protection of the environment."[42] In adopting leak grade definitions that do not require operators to prioritize the repair of large-flow leaks, the Commission concluded that including a flow rate "may distract from a focus on pipeline safety."[43] But this is unsupported and inconsistent with the information in the record before the Commission. The leak grade definitions already include multiple characteristics in each grade, meaning that a leak that satisfies any of the characteristics qualifies for that grade and must be repaired on the appropriate timeline. Expanding the leak grade definitions to incorporate consideration of environmental harms will result in the grading and faster repair of *more* pipeline leaks—which should increase system safety overall, while also improving environmental protection and public health. It is unfathomable why the Commission, without record support regarding "distraction", would choose a much more lax standard than recommended by the federal GPAC. Furthermore, the Commission's conclusion that any environmental consideration "may distract from a focus on pipeline safety" directly contradicts the Legislature's mandate to address both pipeline safety and environmental protection. Clearly, the Legislature envisioned that the Commission could adopt

[42] C.R.S. § 40-2-115(1)(d)(II)(E).
[43] Decision at 16.

standards to achieve both of these goals, recognizing that public safety and environmental protection are mutually reinforcing objectives.

CONCLUSION

The Decision does not fulfill the Legislature's instruction to meet the need for pipeline safety and environmental protection, and does not incorporate many of the recommendations presented by EDF and other stakeholders that are supported by significant record evidence. To ensure meaningful safety and environmental improvements, the Commission should reconsider the Decision and incorporate the changes detailed herein.

REDLINES

EDF respectfully submits the following proposed redlines to the Decision and Final Rule:

4 Code of Colorado Regulations (CCR) 723-11

11001. Definitions.

(a) "Advanced leak detection technology" means commercially available equipment that can detect leaks during screening surveys—which use infrared or laser-based leak detection equipment; mobile, aerial, or satellite-based platforms; or fixed continuous monitoring sensors—at the following sensitivities based on infrastructure type:

~~(a) , for screening surveys, can detect potential or conformed confirmed leaks in a pipeline to use with other Part 192 regulated gas pipeline facilities or within a suite of mutually reinforcing technologies to offer comparable leak detection ability. This can include a variety of commercially available methods to detect leaks including, but not limited to, optical, infrared, or laser-based devices, continuous monitoring via stationary gas detectors, pressure monitoring or other means; mobile surveys; or systemic use of any other commercially available advanced technology, based on the following:~~

(I) For transmission and gathering pipelines, ~~technology using infrared or laser-based leak detection equipment; mobile, aerial, or satellite-based platforms; or fixed continuous monitoring systems must have~~ a minimum flowrate detection threshold of ~~10~~ 3 kg/hr with 90 percent or greater probability of detection; and

(II) For distribution pipelines, at a minimum detection threshold of 0.2 kg/hr with a 90 percent or greater probability of detection.

(III) For surveys of non-building appurtenances and pipelines in buildings, advanced leak detection technology is equipment that can detect leaks at a threshold of 1 percent LEL, or 500 ppm.

…

(p) "Identification survey" means either a leak survey, or the survey conducted after the screening survey to follow up on leak indications and confirm leak locations, and uses ~~technology using~~ handheld leak detection equipment or equipment mounted on ground vehicles must have a minimum sensitivity of 5 ppm.

…

(v) "Lower Explosive Limit" (LEL) means the minimum concentration of gas or vapor in air below which propagation of a flame does not occur in the presence of an ignition source.

…

(fff) "Screening survey" means a leak survey using advanced leak detection technology.

11209. Advanced Leak Detection Survey Requirements.

Effective January 1, 2027, in addition to the requirements incorporated by references in paragraph 11008(b), an operator shall comply with the following subsections. Operators shall perform all leak detection surveys with the use of advanced leak detection technology, as appropriate for each specific survey, as identified in subparagraph 11103(b)(II) annual reporting requirement. In cases where a leak survey cannot be performed in the prescribed interval, the operator shall submit notification and documentation to the PSP Chief.

(a) Transmission and gathering pipelines

(I) For transmission and gathering pipelines in Class 1, 2, and 3 locations outside High Consequence Areas (HCAs), an operator shall perform a leak detection screening and identification survey at intervals not exceeding 15 months, but at least once each calendar year.

(II) For transmission and gathering pipelines in Class 1, 2, and 3 locations within HCAs, an operator shall perform a leak detection screening and identification survey at intervals not exceeding seven and half months, but at least twice a calendar year.

(III) For transmission and gathering pipelines in Class 4 locations, including Class 4 locations within HCAs, an operator shall perform a leak detection screening and identification survey at intervals not exceeding four and half months, but at least four times each calendar year.

(b) Distribution pipelines.

(I) For distribution pipelines inside business districts, operators shall perform a leak detection screening survey annually, not to exceed 15 months, but at least once each calendar year.

(II) For distribution pipelines outside business districts that are steel pipelines without cathodic protection, are known to leak based on material, design, or past operations and maintenance history, or are distributed anode protected pipelines

with a historically deficient reading, operators shall perform a leak detection identification survey annually, not to exceed 15 months, but at least once each calendar year.

(III) For all other distribution pipelines outside of business districts, operators shall perform a leak detection identification survey at intervals not to exceed 39 months, but at least once every three calendar years.

(IV) All operators classified as MMO or LPG are exempt from this rule.

11210. Leak Classification and Repair Requirements

Advanced leak detection technology is intended to provide the operator with overall system health information and will provide indications of leaks. The use of such advanced leak detection technology does not replace the role of conventional leak detection equipment needed to pinpoint a leak for purposes of investigation and classification.

(a) Effective January 1, 2027, each operator shall classify all reported leaks within 48 hours or confirmed discovery. Each classification shall be performed by an Operator Qualified individual, as applicable.

(I) Leak classification shall use the following definitions:

(A) Grade 1 – A leak that represents an existing or probable hazard to persons or property or a grave hazard to the environment, which includes any of the following characteristics: ~~requires immediate repair or continuous action until the conditions are no longer hazardous.~~

(1) Any leak that, in the judgement of operating personnel requires immediate repair;

(2) Any amount of escaping gas has ignited;

(3) Any indication that gas has migrated into a building, under a building, or into a tunnel;

(4) Any below-grade reading of gas at the outside of a building, or areas where gas could migrate to an outside wall of a building;

(5) Any reading of 80% or greater of the LEL (60% of LPG systems) in a confined space;

(6) Any reading of 80% or greater of the LEL (60% for LPG systems) in a substructure, (including gas-associated substructures) from which any gas could migrate to the outside wall of a building;

(7) Any leak that can be seen, heard, or felt and which is in a location that may endanger the general public or property;

(8) Any leak on a gas transmission or regulated gas gathering line with a measured or calculated leakage rate of 100 kg/hr or more.

(B) Grade 2 – A leak that is recognized as being non-hazardous at the time of detection, but justified scheduled repair based on probable future hazard to persons and property, or a significant hazard to the environment, which includes leaks that are not Grade 1 and have any of the following characteristics: ~~Grade 2 leaks include:~~

(1) A reading of 40% or greater of the LEL under a sidewalk in a wall-to-wall paved area;
(2) A reading at or above 100% of LEL under a street in a wall-to-wall paved area that has gas migration;
(3) A reading between 20% and 80% of the LEL in a confined space;
(4) A reading less than 80% of the LEL in a substructure (other than gas-associated substructures) from which gas could migrate to the outside wall of a building;
(5) A reading of 80% or greater of the LEL in a gas-associated substructure from which gas could not migrate to the outside wall of a building;
(6) Any leak that occurs on the pipe body (including pipe-to-pipe connections) of a pipeline operating at or above 30% of more of SMYS;
(7) A leak on a gas transmission line located in an HCA or a gas transmission or regulated gas gathering line, each located in a Class 3 or Class 4 location;
(8) A leak on a distribution line with a measured or calculated leakage rate of 10 standard cubic feet per hour (SCFH) or more;
(9) A leak on a transmission line or regulated gas gathering line with a measured or calculated leakage rate of 10 kg/hr or more; or
(10) any leak of LPG, hydrogen gas, or carbon dioxide that does not qualify as a Grade 1 leak; or
(11) any leak that, in the judgement of operating personnel, is of sufficient magnitude to justify scheduled repair within six months or less.

(C) Grade 3 – A leak that is non-hazardous at the time of detection and is reasonably expected to remain non-hazardous. Grade 3 leaks include any leak that does not meet the criteria of Grades 1 or 2.

(II) Any above grade, non-hazardous leak that can be resolved by tightening, lubrication, or minor adjustment shall not be graded and is beyond the scope of this rule 11210.

Nini Gu, Senior Regulatory &
Legislative Manager
Environmental Defense Fund
2060 Broadway St, Ste 300
Boulder, CO 80302
ngu@edf.org

Magdalen Sullivan, Attorney
Erin Murphy, Senior Attorney
Environmental Defense Fund
555 12th St NW, Suite 400
Washington, DC 20004
msullivan@edf.org
emurphy@edf.org