PHMSA's Pipeline Safety Records Show A Failure to Prevent Ruptures and Enforce the Law

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Introduction

A first-ever analysis of every Notice of Proposed Safety Orders (NOPSO) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) since 2010 has documented an alarming track record, revealing that the agency is largely reactive rather than proactive in enforcement, requiring pipeline operators to follow regulations only after ruptures, leaks, and failures have already occurred. For context, a NOPSO is a regulatory tool used by PHMSA "to notify an operator that a particular pipeline facility has a condition or conditions that pose a pipeline integrity risk to public safety, property, or the environment. The NOPSO proposes specific measures that an operator must take to address the identified risk.[1]"

Specifically, this study revealed that PHMSA has never shut down a pipeline permanently, no matter the level of danger or the severity of the rupture or leak. During the study period, from January 1, 2010 though April, 2026, PHMSA's reporting specifies there have been 10,024 pipeline incidents since 2010 (12,559 since 2006).[2] Despite this, PHMSA only issued 50 (one was subsequently withdrawn) NOPSOs between January, 2010 and April, 2026. From those thousands of incidents, and only 50 NOPSOs, only in seven of them did PHMSA act proactively to remedy risks of failures, and only in two of them did PHMSA even require a reduction of capacity. In not a single of the NOPSOs, did PHMSA proactively require a temporary shutdown. And finally, the study revealed that Enbridge, one of the two largest pipeline operators in the nation, never had a NOPSO issued against them, despite having over 1,068 spills across the Enbridge pipeline system between 1999 and 2013 alone —an average of 71 spills per year. One of Enbridge's most infamous pipelines, Line 5, has experienced 35 spills totaling over a million gallons of oil released along Line 5's route,[3] but

1 Pipeline Safety: Enhanced Emergency Order Procedures, 81 F.R. 70981-82 (Oct. 14, 2016) (to be codified at 49 C.F.R. pt. 190) available at https://www.federalregister.gov/documents/2016/10/14/2016-24788/pipeline-safety-enhanced-emergency-order-procedures. NOPSOs are not PHMSA's only tool, but it is one of their most powerful enforcement tools, and thus a good proxy for an initial study demonstrating PHMSA's lack of proactive enforcement.

2 *All Reported Incidents*, PHMSA, https://portalpublic.phmsa.dot.gov/analytics/saw.dll?PortalPages (last visited Apr. 15, 2026).

3 Malewitz and Mauger, '*History of failure' highlights Line 5 risks outside Straits of Mackinac*, Bridge (July 11, 2018), https://www.bridgemi.com/michigan-environment-watch/history-failure-highlights-line-5-risks-outside-straits-mackinac.

PHMSA has never stepped in to order any shutdown orders, temporary or permanent. The only time that pipeline has been temporarily shutdown, it was the courts that required it.[4]

This study's alarming historical findings revealing weak enforcement across multiple administrations comes at a particularly risky time when the agency is least willing to even meet historical enforcement as PHMSA has announced that industry need not comply with "mandatory safety regulations based upon their own assessment that compliance could [increase energy prices].[5]" This is an unprecedented departure even from the historic lack of enforcement and does not bode well for the future safety of pipelines.

Table 1: Summary of Results: Categorizations of PHMSA's NOPSOs Since 2010

Summary of Results: Categorizations of PHMSA's NOPSOs Since 2010			
Reactive Enforcement	Initiated by External Organization	Proactive Enforcement	Withdrawn
33/50	9/50	7/50	1/50
PHMSA only required a temporary shutdown in 10/33 cases and required a reduction in pressure in only 12/33 NOPSOs.	PHMSA only required a reduction in pressure in 4/9 cases and 0 temporary shutdowns.	PHMSA required only 2/7 to reduce pressure in the pipeline and 0 temporary shutdowns	N/A

I. Methodology

This study was a comprehensive review of each NOPSO issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) since 2010. Each NOPSO was reviewed with critical information collected and categorized into four categories. The spreadsheet of collected information can be viewed here. Specifically, the information collected includes the case number, the date opened and the date of last order from PHMSA or when the order closed, the region, the operator, the current status, the cause

4 Danielle Kaeding, *Enbridge Shuts Down Pipeline In Straits of Mackinac After Michigan Judge Orders Halt to Operations*, **Wisconsin Public Radio** (June 25, 2020), https://www.wpr.org/energy/enbridge-shuts-down-pipeline-straits-mackinac-after-michigan-judge-orders-halt-operations.

5 Analysis of PHMSA's Notice of Limited Enforcement Discretion and Statement of Policy for Issuing Special Permits in Response to National Energy Emergency, Pipeline Safety Trust (Jan. 29, 2026).

of the investigation that led to the NOPSO, an abbreviated listing of the corrective measures recommended/proscribed, and an overall concise summary. The concise summary is categorized into one of four groups: Red–reactive measure after rupture, failure, or leak; Yellow–measure taken after a state or industry action; Green–proactive measure by PHMSA; and White–measure withdrawn.

II. Background

Since 2010, PHMSA has only issued 50 NOPSOs (and one of them was withdrawn), despite PHMSA's own reporting that there have been 10,024 pipeline incidents since 2010 (12,559 since 2006).[6] Of these incidents, 4,596 of the incidents since 2010 (5,670 since 2006) have been categorized as significant incidents,[7] defined as

> those including any of the following conditions, but gas distribution incidents caused by a nearby fire or explosion that impacted the pipeline system are excluded:
>
> 1. Fatality or injury requiring in-patient hospitalization
> 2. $50,000 or more in total costs, measured in 1984 dollars
> 3. Highly volatile liquid releases of 5 barrels or more or other liquid releases of 50 barrels or more
> 4. Liquid releases resulting in an unintentional fire or explosion[8]

A total of 429 of the incidents since 2010 were characterized as serious incidents (585 of the 12,559 since 2006),[9] defined as including "a fatality or injury requiring in-patient hospitalization . . . [excluding] gas distribution incidents caused by a nearby fire or explosion that impact the pipeline system."[10] Despite these numbers, of the 50 NOPSOs, only ten of them required the operators to temporarily shutdown the pipelines, and zero of them required a permanent shutdown.

6 PHMSA, *supra* note 2.

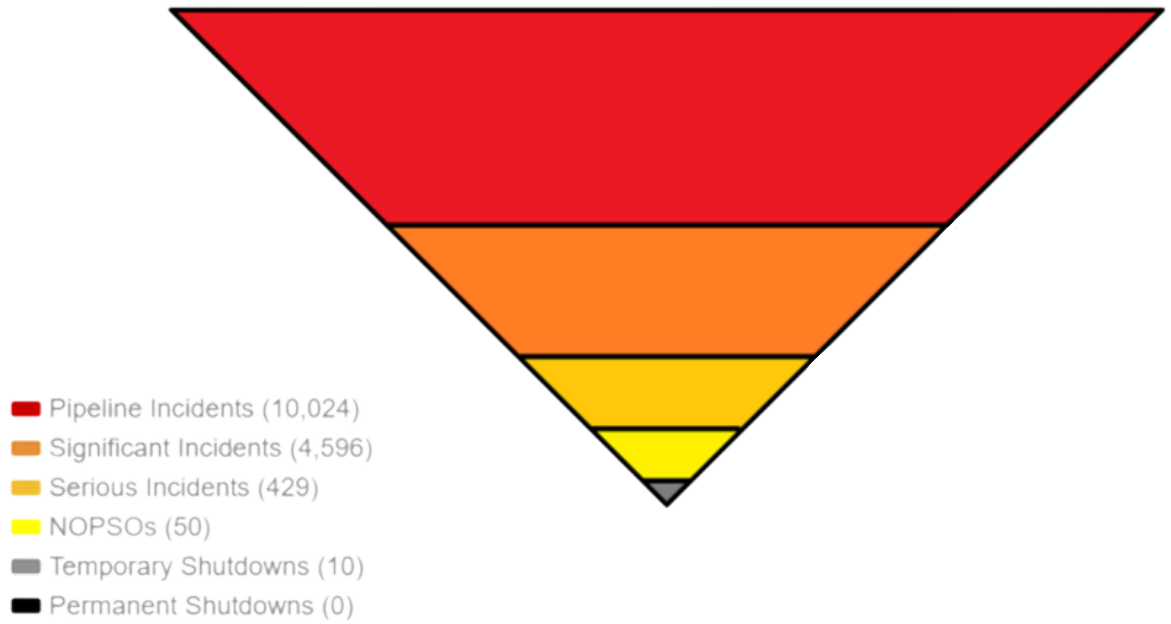
7 *Significant Incidents*, **PHMSA**, https://portalpublic.phmsa.dot.gov/analytics/saw.dll?PortalPages&PortalPath=/shared/PDM%20Public%20Website/_portal/SC%20Incident%20Trend&Page=Significant (last visited Apr. 15, 2026).

8 *Pipeline Incident 20 Year Trends*, **PHMSA**, https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-20-year-trends (last visited Apr. 15, 2026).

9 *Serious Incidents,* **PHMSA***,* https://portalpublic.phmsa.dot.gov/analytics/saw.dll?PortalPages&PortalPath=/shared/PDM%20Public%20Website/_portal/SC%20Incident%20Trend&Page=Serious *(last visited Apr. 15, 2026).*

10 PHMSA, *supra* note 8.

Chart 1: Summary of Results: Pipeline Incidents and PHMSA's NOPSOs Since 2010



III. PHMSA's Enforcement is Primarily Reactive to Ruptures, Leaks, and Other Failures

The analysis of PHMSA's NOPSO track record since 2010 reveals that their enforcement is almost exclusively reactive to ruptures, leaks, and other failures—if they are reported. Of the 50 NOPSOs, 33 of them were reactive to ruptures, leaks, and other failures; 1 was withdrawn; 9 were initiated after a state organization, other federal agency, or the operator themselves reported an issue or failed to submit a required report; and only 7 were issued after a proactive or regularly scheduled inspection by PHSMA. Of those 33 reactive NOPSOs, only ten of them required temporary shutdowns, and only 12 of them were required to reduce operating pressure. Of the 7 proactive NOPSOs, none of them resulted in a temporary shutdown and only two of them even resulted in a reduction of capacity in the pipelines. In the excel document, these are respectively colored red (reactive), white (withdrawn), yellow (initiated by organization), and green (proactive).

Image 1: Enbridge Line 6B Ruptured Pipeline [11]

An example of a reactive NOPSO was the order issued to Colonial Pipeline Company on March 29, 2021.[12] A local resident (not the operator), first discovered the pipeline's rupture on August 14, 2020.[13] The operator then estimated the rupture released 75 barrels of gasoline. It was repeatedly updated to an estimated 6,490 barrels, then 28,571 barrels, and ultimately estimated to have released just shy of 2 million gallons of gasoline and was the largest gasoline spill in U.S. history.[14] The operator completed repairs and restarted the line that had been ruptured on August 19, 2020, before a PHMSA NOPSO was even issued, which then found "[t]he conditions that led to the Failure potentially exist throughout the Colonial Pipeline System . . . the continued operation of the Colonial Pipeline System without corrective measures would pose a pipeline integrity risk to public safety, property, or the environment.[15] Despite finding that "Colonial's inability to effectively detect and respond to this release, as well as other past releases" and the before mentioned risks, PHMSA did not shut down the pipeline until systemwide improvements were made or even require a reduction in pressure or capacity within the pipeline in affected areas.[16]

11 **NRDC**, Photograph of Enbridge Line 6B Ruptured Pipeline in Cecilia Jamasmie, Enbridge to Pay $61 Million Fine for 2010 Michigan Oil Spills, **Bus. Vancouver** (July 22, 2016, 9:09 AM), https://www.biv.com/news/resources-agriculture/enbridge-pay-61-million-fine-2010-michigan-oil-spi-8246877.

12 *Enforcement Actions Details: Case CPF: 22021005NOPSO*, **PHMSA** (Aug. 25, 2025), https://primis.phmsa.dot.gov/enforcement-data/case/22021005NOPSO.

13 *Id.*

14 Mike Soraghan, *N.C. Pipeline Caused Largest U.S. Gasoline Spill, Records Say,* ***E&E News*** *(July 25, 2022),* https://www.eenews.net/articles/n-c-pipeline-caused-largest-u-s-gasoline-spill-records-say/.

15 *https://primis.phmsa.dot.gov/enforcement-documents/22021005NOPSO/22021005NOPSO_Notice%20of%20Proposed%20Safety%20Order_03292021_(20-188854)_text.pdf* .

16 *Id.*

An example of the state organization, federal agency, or operator reported issue or failure is the order that was issued to Columbia Gas Transmission, LLC on July 6, 2011.[17] There, an employee of the operator "observed bubbles in a creek in a remote area of Tioga County during routine inspection activities."[18] "The leak resulted in the release of 1,328 MCF of natural gas which did not ignite."[19] The New York State Department of Public Service (NY DPS) then conducted an investigation which determined the cause of the leak.[20] NY DPS then sent the investigation to PHMSA who initiated their own investigation and subsequently issued the NOPSO.[21] There were a total of nine NOPSOs issued since 2010 that are similarly categorized where either a state organization, different federal agency, or the operator submitted a report that initiated a PHMSA investigation and subsequent NOPSO. Of these nine, none of them were shut down even temporarily and only four of them were required to reduce capacity as a safety precaution.

An example of PHMSA proactively issuing a NOPSO before a rupture, leak, or failure is the order issued to the City of Vernon on March 6, 2012.[22] There, following a request by the operator for a special permit as well as a notification that they would switch methods of integrity reassessment to save money, PHMSA conducted follow-up inquiries and an investigation which subsequently led to the NOPSO.[23] This is one of the rare examples of PHMSA issuing a NOPSO prior to a leak, failure, or rupture. This rare example of a proactive issuance of a NOPSO was triggered by the request from the operator for the special permit. Unfortunately, established pipelines do not often seek special permits that trigger additional attention from PHMSA.

Out of the seven NOPSOs that were categorized as proactive, only two of them required a reduction of capacity while remedies were underway. The City of Vernon order discussed above is one of them, and required the operator to reduce the Maximum Allowable Operating Pressure (MAOP) by 20% until written approval to restore the pipeline to normal capacity was granted by PHMSA.[24] The remaining five orders did not even require a reduction in capacity while the required remedies were underway.

To sum up: **out of the 10,024 incidents in this time period, 4,596 of them were significant and 429 of them resulted in death or hospitalization. In only two cases did**

17 *CPF No. 2-2021-005-NOPSO,* ***PHMSA*** *(Mar. 29, 2021), https://primis.phmsa.dot.gov/enforcement-documents/120111013S/120111013S_NOPSO_07062011_text.pdf.*

18 *Id.*

19 *Id.*

20 *Id.*

21 *Id.*

22 *CPF 5-2012-0004S*, **PHMSA** (Mar. 6, 2012), https://primis.phmsa.dot.gov/enforcement-documents/520120004S/520120004S_NOPSO_03062012_text.pdf.

23 *Id.*

24 *Id.*

PHMSA proactively require a reduction of pressure as a safety precaution–and in no cases was a pipeline shut down, even temporarily, before the incident.

Overall, PHMSA's posture for enforcement is reactive and thus dangerous.

IV. PHMSA's Enforcement Failures Stem in Part From its Over-Reliance on Industry Self-Reporting

PHMSA is charged with ensuring the safety of nearly 3.3 million miles of pipelines nationwide, as well as "176 liquefied natural gas plants, 398 underground natural gas storage fields, and 8,525 hazardous liquid breakout tanks."[25] To ensure the safety of all this infrastructure, PHMSA's 232 inspection and enforcement staff along with 450 state inspectors would each be responsible for inspecting nearly 5,000 miles of pipeline alone without considering all of the other infrastructure PHMSA is responsible for inspecting.[26]

It is clear that "PHMSA has been notoriously underfunded forever [and] they just don't have the staff to ensure operators are following the rules."[27] "PHMSA staffing, which faces persistent shortfalls affecting the agency's ability to conduct inspections and revise regulations"[28] and the chronic lack of funding contributes to this lack of enforcement by PHMSA, and results in PHMSA's reliance on industry self-reporting.[29] This means that PHMSA must consistently rely on industry to self-police to ensure communities and the environment are safeguarded.

However, this study of PHMSA's NOPSOs reveals that in 5 of the orders, PHMSA affirmatively found that pipeline operators had failed to report prior leaks and other failures as required per federal regulation. An even larger number of the NOPSOs, such as the July 23, 2024 NOPSO issued to the Town of Aguilar, revealed that the operators failed to maintain records as required by federal regulation.[30]

25 *Federal Effort*, **PHMSA** (Feb. 17, 2026), https://www.phmsa.dot.gov/pipeline/effort-allocation/federal-effort#:~:text=OPS's%20232%20federal%20inspection%20and,over%20the%20last%20twenty%20years.

26 *Id.*

27 Kenneth Clarkson, *Congress at Odds Over Pipeline Safety Funding as Ruptures Continue,* **Pipeline Safety Trust** (Jan. 16, 2023), https://pstrust.org/congress-at-odds-over-pipeline-safety-funding-as-ruptures-continue/.

28 **Paul W. Parfomak, Cong. Rsch. Serv., R44201, DOT's Federal Pipeline Safety Program: Background and Issues for Congress** 1 (2025).

29 Jacob Wendler, *Pipeline and Hazardous Material Safety Agency Gutted as Trump Pushes More Pipes,* **Detroit News** (Mar. 19, 2025, 10:56 AM, ET), https://www.detroitnews.com/story/news/nation/2025/03/19/pipeline-and-hazardous-material-safety-agency-gutted-as-trump-pushes-more-pipes/82542152007/.

30 *Enforcement Action Details: Case CPF: 52024028NOPSO*, **PHMSA** (Jan. 14, 2026), https://primis.phmsa.dot.gov/enforcement-data/case/52024028NOPSO.

One example of PHMSA affirmatively finding that a pipeline operator failed to report prior leaks was the December 18, 2024 NOPSO issued to Boardwalk Petrochemical Pipeline,[31] LLC (BP Pipeline). This NOPSO was issued after PHMSA reactively initiated an investigation of the safety of the operator's ethylene pipeline system in Louisiana and Texas after a leak was reported.[32] The reported leak was "discovered on the Pipeline by Colonial Pipeline (Colonial) personnel while performing maintenance work on its pipeline, which is adjacent to the BP Pipeline, on June 10,2024. Colonial determined that the leak was not on its pipeline and notified [BP Pipeline] personnel."[33] Four days after the leak was initially discovered, the operator determined its pipeline was leaking and informed the National Response Center. The pipeline was manufactured in 1953 and was found to have "had 18 leaks due to use of LF-EWR pipe from 2016 to present, not including the current leak. Previous integrity assessment and continual evaluation methods have proven ineffective to detect these leaks." The operator could not inform PHMSA how the leaks were detected, and "did not report the 18 leaks discovered between 2016 and 2024 to the National Response Center (NRC) as required by 49 C.F.R. § 195.52, nor was an accident report filed as required by § 195.54."[34] It is reasonable to surmise that if this leak had been found internally, it too would not have been reported.

Another factor contributing to the lack of reliability from industry self-reporting is that often the operators themselves are often unaware of failures, leaks, and ruptures, relying on residents to find and report them. One example of this is a NOPSO issued to Tesoro High Plains Pipeline Company, LLC on October 31, 2013.[35] There an "estimated spill volume [of] about 20,000 barrels of crude oil" was first discovered by a farmer who "who noticed oil seeping from the ground," "while harvesting his crops."[36] Several other examples are provided elsewhere in this report.

31 *Enforcement Action Details: Case CPF: 32024081NOPSO,* **PHMSA** (July 7, 2025), https://primis.phmsa.dot.gov/enforcement-data/case/32024081NOPSO .

32 *Id.*

33 *Id.*

34 *Id.*

35 *Enforcement Action Details: Case CPF: 320135032S*, **PHMSA** (Mar. 24, 2016), https://primis.phmsa.dot.gov/enforcement-data/case/320135032S.

36 *Id.*

Image 2: Tesoro Oil Spill Covers Farmfield [37]

Finally, PHMSA cannot trust industry to follow regulations. These NOPSOs demonstrated that many of the investigations found that operators were not following federal regulations or even failed to identify infrastructure that were subject to PHMSA's regulations. One example of operators not following federal regulations is the NOPSO issued to the Town of Aguilar after the operator failed to provide written procedures in response to a gas line emergency as required per federal regulation.[38] An example of operators failing to identify infrastructure subject to PHMSA's regulations is the Sunoco Marketing and Terminals Facility. After an accident brought the Sunoco Marketing & Terminals facility to PHMSA's attention in 2018, PHMSA discovered that the operator was operating 71 tanks and piping that they had not identified as under PHMSA's jurisdiction when they were in fact subject to the pipeline safety regulations.[39] The operator had failed to report failures with these 71 tanks and piping that were subject to § 195.50.[40]

In short, PHMSA cannot safely rely on industry to self-report.

V. PHMSA Enforcement Failures Also Stem From Other Systemic Issues Including Budgeting, Staffing, and Industry Capture, as well as Insufficient Insulation from Politics

While outside the scope of this study, PHMSA faces many systemic issues to being an effective enforcement agency, including being historically underfunded budget, and

37 Neil Lauron, Photograph of the Tesoro Oil Spill in Tesoro Logistics Restarts Pipeline Shut Down by Oil Spill, **Grand Forks Herald** (Nov. 1, 2013, 5:15 PM), https://www.grandforksherald.com/newsmd/tesoro-logistics-restarts-pipeline-shut-down-by-oil-spill.

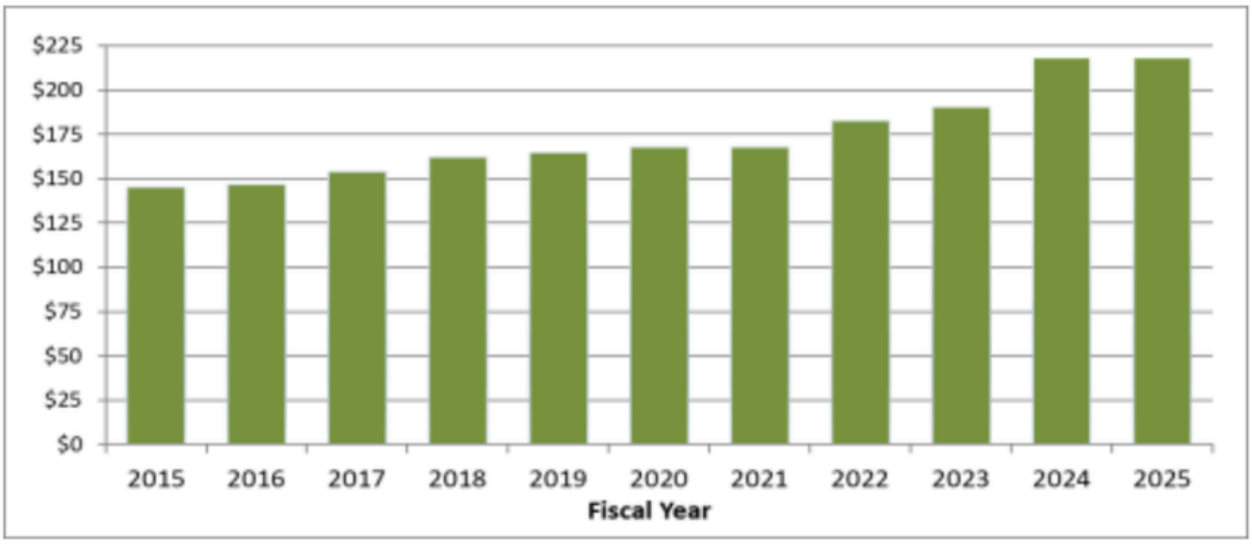
38 *Enforcement Action Details: Case CPF: 52024028NOPSO*, **PHMSA** (Jan. 14, 2026), https://primis.phmsa.dot.gov/enforcement-data/case/52024028NOPSO.

39 *Id.*

40 *Id.*

insufficiently staffed.[41] PHMSA's budget has slightly increased over the past decade, but not significantly despite inflation[42] and the rapid expansion of interstate pipelines.[43]

Chart 2: PHMSA's Budget in Millions of Dollars from 2015-2025[44]



"[PHMSA] is requesting $349.8 million for Fiscal Year (FY) 2027,"[45] but it is yet to be seen how much money Congress appropriates to the agency. To put this in perspective, one F-35B Joint Strike Fighter costs $135.8 million per plane and has a $1.3 trillion life cycle cost "to operate and sustain the aircraft over its 66-year life cycle."[46] The U.S. spent $12.3 billion during the first six days of the Iran conflict on munitions alone in just the first six days.[47] More directly relevant, Enbridge incurred more than $1.2 billion in clean up costs after their Line 6B pipeline ruptured into the Kalamazoo River.[48]

41 Daniel Onyango, *US Pipeline Boom Outpaces Safety Agency's Resources Sparking Safety Concerns*, **Pipeline Tech. J.** (Jan. 19, 2024), https://www.pipeline-journal.net/news/us-pipeline-boom-outpaces-safety-agencys-resources-sparking-safety-concerns.

42 Hiranmayi Srinivasn, *Historical U.S. Inflation Rate by Year: 1929 to 2025*, **Investopedia** (Dec. 22, 2025), https://www.investopedia.com/inflation-rate-by-year-7253832.

43 *Natural Gas Demand Sparks the Largest U.S. Pipeline Build-Out Since 2008*, **Morningstar** (Jan. 12, 2026), https://dbrs.morningstar.com/research/471424.

44 **Paul W. Parfomak, Cong. Rsch. Serv.**, R44201, **DOT's Federal Pipeline Safety Program: Background and Issues for Congress** 3 (2025), available at https://www.congress.gov/crs-product/R44201.

45 **PHMSA, Budget Estimates: Fiscal Year 2027** 1 (2026), available at https://www.transportation.gov/media/2221.

46 *Fact Sheet: F-35 Joint Strike Fighter: Costs and Challenges,* **Ctr. For Arms Control and Non-Proliferation** (July, 2021), https://armscontrolcenter.org/f-35-joint-strike-fighter-costs-challenges/.

47 Mark F. Cancian & Chris H. Park, *Iran War Cost Estimate Update: $11.3 Billion at Day 6, $16.5 Billion at Day 12*, **Ctr. For Strategic & Int'l Stud.** (Mar. 13, 2026), https://www.csis.org/analysis/iran-war-cost-estimate-update-113-billion-day-6-165-billion-day-12#.

48 David Hasemyer, *Enbridge's Kalamazoo Spill Saga Ends in $177 Million Settlement*, **Inside Climate News** (July 20, 2016), https://insideclimatenews.org/news/20072016/enbridge-saga-end-department-justice-fine-epa-kalamazoo-river-michigan-dilbit-spill/.

PHMSA's small budget limits its staffing and ability to fund research and other critical initiatives that can increase safety and reduce pipeline incidents.

As noted above in section IV, PHMSA faces significant issues with being understaffed as PHMSA's 232 inspection and enforcement staff along with 450 state inspectors would each be responsible for inspecting nearly 5,000 miles of pipeline alone without considering all of the other infrastructure PHMSA is responsible for inspecting.[49] Without increased staffing, PHMSA will continue to rely upon industry self-reporting of incidents and issues with their pipelines.

Even if PHMSA was fully budgeted and sufficiently staffed, PHMSA has historically suffered from near-complete industry capture and a revolving door between industry and regulators. In 2010 when Enbridge's Line 6 Pipeline ruptured spilling over one million gallons of oil into the Kalamazoo River, the head of PHMSA had to recuse herself because she "had served as outside counsel to Enbridge before she was named to lead PHMSA."[50] Currently, the Deputy Administrator of PHMSA and their chief council both worked for an influential pipeline industry group prior to taking positions in the agency.[51]

The U.S. Government Accountability Office (GAO) recently found that PHMSA lacks plans to implement two final rules they passed in 2019 and 2022 "which could help pipeline operators improve incident assessment and mitigation."[52] It is not clear if this lack of planning is caused by insufficient budget, lack of staffing, industry capture, or even politics.

PHMSA also lacks sufficient insulation from politics. While some federal agencies have degrees of insulation from politics, like the Federal Reserve, PHMSA lacks all such protections. That means, an administration that is concerned with energy prices rather than following the law can order PHMSA to not conduct their legislatively enacted purpose. For example, in January, 2026, PHMSA announced that industry need not comply with "mandatory safety regulations based upon their own assessment that compliance could [increase energy prices]."[53] Further, since January 2025, PHMSA has initiated fewer enforcement actions than in any other year, and "civil penalties have plummeted by an

49 *Federal Effort*, **PHMSA** (Feb. 17, 2026), https://www.phmsa.dot.gov/pipeline/effort-allocation/federal-effort#:~:text=OPS's%20232%20federal%20inspection%20and,over%20the%20last%20twenty%20years.

50 Andrew Restuccia & Elana Schor, *'Pipelines Blow Up and People Die'*, **Politico** (A https://www.politico.com/story/2015/04/the-little-pipeline-agency-that-couldnt-217227

51 *https://www.propublica.org/article/trump-dot-oil-gas-pipeline-ethics-questions-senator-cantwell*

52 **Elizabeth Repko, GAO-24-106690, Gas Pipeline Safety: Better Data and Planning Would Improve Implementation of Regulatory Changes** (2024) available at https://www.gao.gov/products/gao-24-106690.

53 *Analysis of PHMSA's Notice of Limited Enforcement Discretion and Statement of Policy for Issuing Special Permits in Response to National Energy Emergency*, Pipeline Safety Trust (Jan. 29, 2026).

astounding 98%."[54] Additionally, every member of the advisory committees that support PHMSA's work have been fired and these positions have gone unfilled since January 16th, 2025. Research into the dangers of pipelines and other safety related projects have been cancelled.[55]

VI. *PHMSA Has Never Issued a NOPSO for Enbridge Despite Enbridge Being the Second Largest Pipeline Operator in the United States, Having the Second-Largest Inland Oil Spill in United States' History, and 804 Spills Across the Enbridge Pipeline System Between 1999 and 2010 Alone—an Average of 73 Spills Per Year.*[56]

The study also revealed that Enbridge, the second largest pipeline operator in the United States,[57] has never been issued a NOPSO since the 2010 PHMSA recordkeeping began. Between 1999 and 2010, Enbridge had an average of 73 spills per day—804 spills across their pipeline system.[58] The most egregious example of their spills included the July 25, 2010 inland oil spill "saturating around 40 miles of the Kalamazoo River watershed . . . [after] a 6-foot break in their [Line 6B] pipeline . . . rupture[d and] went undetected and unreported for nearly 17 hours."[59] One of Enbridge's other infamous pipelines, Line 5, has experienced 35 spills totaling over a million gallons of oil released along Line 5's route,[60] but PHMSA has never stepped in to order any shutdown orders, temporary or permanent. The only time that pipeline has been temporarily shutdown, it was the courts that required it.[61]

54 Jesse Coburn, *Amid Trump's Proposed Pipeline Safety Rollbacks, Senator Questions Regulators' Industry Ties*, **Propublica** (Dec. 15, 2025, 3:00 PM), https://www.eenews.net/articles/pipeline-safety-nominee-commits-to-enforcement/#.

55 Mike Soraghan, *Trump Administration Cancels Pipeline Safety Research*, **Energywire** (Dec. 15, 2025, 6:54 AM EST), https://subscriber.politicopro.com/article/eenews/2025/12/15/trump-administration-cancels-pipeline-safety-research-00689848.

56 *Environmental Group says Enbridge has History of Spills,* ***WZZM*** *(July 24, 2012, 5:31 AM EDT),* https://www.wzzm13.com/article/news/local/environmental-group-says-enbridge-has-history-of-spills/69-363387212.

55 *Top 10 Pipeline Companies in the World in 2021 by Pipeline Length*, **Global Data**, https://www.globaldata.com/companies/top-companies-by-sector/oil-gas/global-pipeline-operators-by-total-pipeline-length/ (last visited Apr. 17, 2026).

58 **WZZM**, *supra* note 56.

59 *Id.*

60 Malewitz and Mauger, '*History of failure' highlights Line 5 risks outside Straits of Mackinac*, Bridge (July 11, 2018), https://www.bridgemi.com/michigan-environment-watch/history-failure-highlights-line-5-risks-outside-straits-mackinac.

61 Danielle Kaeding, *Enbridge Shuts Down Pipeline in Straits of Mackinac After Michigan Judge Orders Halt to Operations*, **WPR** (June 25, 2020), https://www.wpr.org/energy/enbridge-shuts-down-pipeline-straits-mackinac-after-michigan-judge-orders-halt-operations#.

Image 3: Enbridge Oil Spill Covered Over 40 Miles of the Kalamazoo Watershed in Over 1 Million Gallons of Oil [62]

Line 5 Spill History					
YEAR	**LOCATION**	**STATE**	**BARRELS LOST**	**CAUSE**	**Discovered By:**
2025	SUPERIOR	WI	0.24	EQUIPMENT FAILURE	leak detection - building alarm
2023	MARYSVILLE	MI	0.59	EQUIPMENT FAILURE	leak detection - building alarm

62 Photograph of Crews Responding to an Oil Spill in a Tributary to the Kalamazoo River in 2010 in Patrick Shea, Crude Oil Catastrophes Part 1: "Our Darkest Day", **Mich. Pub. Radio** (July 26, 2022, 2:12 PM EDT), https://www.michiganpublic.org/show/stateside/2022-07-26/crude-oil-catastrophes-part-1-our-darkest-day.

2022	ASHLAND	WI	0.1	WELD FAILURE - LONGITUDINAL WELD	local personnel - integrity dig
2018	RAPID RIVER	MI	0.24	MATERIAL, WELD, EQUIPMENT FAILURE	control center
2017	LEWISTON	MI	0.01	MATERIAL, WELD, EQUIPMENT FAILURE	local personnel
2017	IRON RIVER	MI	0.01	CRACK	local personnel
2017	BAY CITY	MI	0.71	EQUIPMENT FAILURE	Utility Personnel
2015	MARENISCO	MI	0.19	EQUIPMENT FAILURE	local personnel
2014	MANISTIQUE	MI	NULL - NGL vapor	CRACK	local personnel
2013	MACKINAW CITY	MI	0.48	EQUIPMENT FAILURE	control center

2012	STERLING	MI	20	CRACK	local personnel
2010	LAPEER	MI	0.24	EQUIPMENT FAILURE	local personnel
2009	LEWSITON	MI	0.24	MATERIAL, WELD, EQUIPMENT FAILURE	N/A
2007	MACKINAW CITY	MI	0.71	EQUIPMENT FAILURE	N/A
2007	RAPID RIVER	MI	0.71	EQUIPMENT FAILURE	N/A
2006	MARYSVILLE	MI	20	EQUIPMENT FAILURE	local personnel
2005	MARYSVILLE	MI	0.5	EQUIPMENT FAILURE	N/A
2005	BAY CITY	MI	100	EQUIPMENT FAILURE	local personnel
2004	JUNIATA	MI	1	NATURAL FORCE CRACK	N/A

2003	BAY CITY	MI	500	MATERIAL AND/OR WELD FAILURES	local personnel
2002	SUPERIOR	WI	10	MATERIAL, WELD, EQUIPMENT FAILURE at the GIRTH WELD	Air or ground surveillance
1999	CRYSTAL FALLS	MI	5300	DAMAGE BY NATURAL FORCES	Utility Personnel
1994	MARYSVILLE	MI	1	OUTSIDE FORCE DAMAGE	Air Patrol
1993	NORTH BRANCH	MI	5	CRACK	Public - landowner
1992	WAKEFIELD	MI	100	INCORRECT OPERATION BY OPERATOR PERSONNEL	local personnel
1992	SUPERIOR	WI	7	EQUIPMENT FAILURE	local personnel

1990	MACKINAC	MI	15	CRACK - LONGITUDINAL WELD	Air Patrol
1988	MACKINAC	MI	40	CRACK - LONGITUDINAL WELD	N/A
1980	HIAWATHA NATIONAL FOREST	MI	5	N/A	N/A
1976	GOGEBIC COUNTY	MI	5000	“OTHER”	N/A
1972	ENGADINE	MI	100	DEFECTIVE WELD	N/A
1972	SAXON	WI	350	“OTHER”	N/A
1972	IRON RIVER	MI	6000	WELD FAILURE - LONGITUDINAL WELD	N/A
1968	GOGEBIC COUNTY	MI	6800	MATERIAL, WELD, EQUIPMENT FAILURE	N/A
1968	GOGEBIC COUNTY	MI	2300	“OTHER”	N/A
1968	IRON	MI	300	“OTHER”	N/A

		TOTAL LOST IN BARRELS	**26,978.97**		
		TOTAL LOST IN GALLONS	**1,130,000**		

Line 5 is particularly controversial in large part because of its age, location, the fuel that it carries, near-disaster incidents, and because of PHMSA's actions towards it. Line 5 was built in 1953, which makes it particularly concerning. "Older pipelines are considered at most risk of bursting. At least 1,984 pipeline incidents from 2002 to [2015] — or about a quarter of all reported incidents — involved failed parts installed before 1970.[63] Line 5 also runs through some extremely sensitive areas such as the Straits of Mackinac. The straits would be "the worst possible place for an oil spill in the Great Lakes" because of the complex currents that are "particularly strong and shift directions frequently.[64] Further, if the rupture occurred in the winter, "ice would obstruct containment efforts and render effective cleanup nearly impossible.[65] And, light crude oil (carried by Line 5) is especially hard to clean up because some of it sinks in water, rather than floats. "Line 5 proved its vulnerability after being damaged on two different occasions by anchors from passing ships within two years."[66] One of the anchor strikes dented the pipeline and another anchor strike yanked the pipeline ten feet out of alignment.[67] "Enbridge's internal investigation revealed that a ship under contract to Enbridge likely dragged a cable that became entangled with a pipeline support, damaging both the support and the pipeline."[68] A Michigan Circuit Court subsequently "ordered a temporary shutdown of the pipeline, writing that the risk of harm to the Great Lakes would be 'not only substantial but also in some respects irreparable.'"[69] PHMSA, not only failed to take any action prior to or after the strikes to protect the public,

63 Restuccia & Schor, *supra* note 49.

64 Morgan Sherburne, *Straits of Mackinac 'worst possible place' for a Great Lakes oil spill, U-M researcher concludes*, **Univ. of Mich.** (July 10, 2014), https://www.sierraclub.org/wisconsin/line-5.

65 *Id.*

66 *Id.*

67 Matt Davenport, Line 5 and its Risks: 'The Consequences of Failure Would be Catastrophic', **Univ. of Mich.** (May 28, 2025), https://news.umich.edu/line-5-and-its-risks-the-consequences-of-failure-would-be-catastrophic/.

68 *Investigations Into Disturbances of Line 5 in the Straits of Mackinac Discovered in May and June of 2020,* **Enbridge** (Aug. 21, 2020), https://forloveofwater-wp-uploads.s3.us-east-2.amazonaws.com/wp-content/uploads/2023/09/Enbridge-Updated-Line-5-Investigation-Report-August-2020-c2.pdf at 8.

69 *Id.*

property, or the environment, but its only role in these strikes was to approve the pipeline's restart, thereby helping Enbridge. [70]

Conclusion

An analysis of each of the 50 NOPSOs issues by PHMSA since 2010 makes clear that PHMSA's reliance on self-reporting from industry and historical reactive posture makes it incapable of protecting Americans, property, and the environment from pipeline disasters. Instead of working towards more enforcement to protect people, property, and the environment, PHMSA has announced that industry need not comply with "mandatory safety regulations based upon their own assessment that compliance could [increase energy prices]."[71] PHMSA is an agency that has continuously failed to protect Americans, their property, and the environment, and which has decided to double down on bad policy of trusting industry to police themselves.

Substantial structural reforms are required if PHMSA is ever to have the ability to safeguard people, property, and the environment. For example, substantially increasing the independence of the agency from political interference with enforcement, similar to the protection Congress provided to the Federal Reserve, would mitigate concerns about the executive branch politicizing enforcement. Further, statutory amendments could prohibit the revolving door issues and reduce industry capture by prohibiting the hiring of employees that have worked in industry in the past five years and prohibiting employees from entering the industry for five years after working for the agency. Congress could also provide PHMSA with an increased budget and staff, and require PHMSA to increase the prevalence and depth of inspections on older pipelines that are more likely to fail. Finally, Congress can authorize States to implement their own safety regulations on interstate pipelines in addition to PHMSA's regulations, as long as the States' regulations are at least as protective, and at least as stringent, as the federal regulations.

70 *Enbridge Wins Approval to Restart East Leg of Line 5 Pipeline Through Great Lakes*, **Global News** (Sep. 10, 2020, 11:02 AM), https://globalnews.ca/news/7326382/enbridge-restarts-east-leg-line-5/.

71 Analysis of PHMSA's Notice of Limited Enforcement Discretion and Statement of Policy for Issuing Special Permits in Response to National Energy Emergency, Pipeline Safety Trust (Jan. 29, 2026).