



211 North Union Street  
Suite 100  
Alexandria, VA 22314  
Tel. (703) 574-7376

March 8, 2017

Office of the Chief Counsel  
Attn: Ms. Vasiliki Tsaganos, Acting Chief Counsel  
Pipeline and Hazardous Materials Safety Administration  
United States Department of Transportation  
East Building, 2<sup>nd</sup> Floor  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Ms. Tsaganos,

Pursuant to 49 C.F.R. Section 190.331, the Alliance for Innovation and Infrastructure respectfully submits the enclosed petition (and supporting exhibit) requesting an amendment to the code of federal regulations requiring each state damage prevention program to make incident reporting mandatory and to make the data set derived from incident reports available to the public in an accessible format.

Specifically, we request that a mandatory incident reporting requirement be an essential element for any state to have their damage prevention program deemed effective under 49 CFR Section 198.55.

Thank you for your consideration.

Respectfully Submitted,

A handwritten signature in blue ink that reads 'Brigham A. McCown'.

Brigham A. McCown  
Founder and Chairman  
Alliance for Innovation & Infrastructure  
[www.aii.org](http://www.aii.org)

BEFORE THE  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

---

SUBMITTED BY  
THE ALLIANCE FOR INNOVATION AND INFRASTRUCTURE

---

The Alliance for Innovation and Infrastructure (Aii) (“Petitioners”) consists of two non-profits, the Public Institute for Facility Safety (PIFS), an IRS approved, tax-exempt 501(c)(3) organization, and the National Infrastructure Safety Foundation, an IRS approved, tax-exempt 501(c)(4) organization. Two volunteer boards govern the Alliance. These boards also work in conjunction with the Alliance’s Advisory Council.

Aii is a non-partisan, independent national educational organization dedicated to identifying our nation’s infrastructure needs and deficiencies, creating awareness of those needs and deficiencies, and developing and advocating for solutions to meet the challenges presented by those needs and deficiencies. Aii strives to promote proven innovative technologies and best practices to create higher standards that lead to better outcomes, whether measured by safety, efficiency, or increased investment from the public and private sectors.

Aii submits the following petition to request a timely regulatory amendment, which will make incident reporting a mandatory component of all state damage prevention programs in order to be deemed effective, certifiable, and consequently compliant with 49 C.F.R. Section 198.

## **Background**

As the U.S. economy gets back on track as it has in first half of 2017, and economic activity ramps back up, new construction starts and other excavation activity will follow. New construction creates jobs, and is a positive indicator of a strong economy, but it also increases the risk of striking and damaging underground infrastructure, including oil and gas pipelines. Consistent with the Administration's stated goal of modifying or eliminating "outdated" regulations with a goal of "alleviating unnecessary burdens placed on the American people" (See Executive Order 13777) without sacrificing any of the safety benefits, Damage Prevention programs should be updated to ensure all regulatory decisions are being made with the most current and best available data in hand.

Across the country, outdated systems using spray paint and flags are being used to track, and hopefully avoid striking, underground infrastructure rather than the handheld electronics and GPS location services most people use in their day-to-day lives. Implementing less burdensome regulatory regimes that improve safety by replacing outdated methods with these newer more efficient technologies meets the goals of Executive Order 13777, while also improving safety and economic outcomes, i.e. fewer incidents of pipeline damage. However, it is also true that new regulations should never be implemented until there is sufficient data demonstrating that there is a need for regulation, the new regulation is narrowly tailored to meet that need, and it is the least economically burdensome way to achieve the regulation's goals. This petition is directed at making that data available nationwide.

## **Authority to Act**

Under the authority of 49 U.S.C. Sections 60105, 60106, and 60114 the United States Department of Transportation's (U.S. DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) promulgated regulations establishing guidelines for distributing grant funds to states to cover up to 80 percent of the state's costs of the "personnel, equipment, and activities reasonably required to carry out a safety program for intrastate pipeline facilities under a certification or agreement with" PHMSA.<sup>1</sup> The statute also requires that each state establish a One-call notification system that will govern the excavation process from plan through completion.

Each state application must certify that the state's pipeline safety program complies with a number of conditions, one of which is "encouraging and promoting the establishment of a program designed to prevent damage by demolition, excavation, tunneling, or construction activity to the pipeline facilities to which the certification applies that subjects persons who violate the applicable requirements of that program to civil penalties and other enforcement actions..."<sup>2</sup>

---

<sup>1</sup> 49 C.F.R. Section 198.

<sup>2</sup> 49 U.S.C. Section 60105(b)(4).

Further, the statute requires that state programs govern the excavation process from start to finish and specifically states that any person “who engages in demolition, excavation, tunneling, or construction and who causes damage to a pipeline facility that may endanger life or cause serious bodily harm or damage to property” must promptly report the damage to the facility operator and notify the appropriate authorities if the damage “results in the escape of any flammable, toxic, or corrosive gas or liquid...”<sup>3</sup>

The petitioners assert that any and all damage by force to natural gas or hazardous liquid pipelines may endanger life or at the very least cause bodily harm or damage to property. As such, we assert that PHMSA has the statutory authority to require that states implement a mandatory incident reporting requirement to the “appropriate authority” in order to have their program recertified on their first annual certification after promulgation of this rule.

To support this assertion further, the petitioners point to 49 C.F.R. 198.55 where PHMSA articulates review criteria for state damage prevention programs as a prerequisite of an enforcement proceeding, one of which asks whether states “have a reliable mechanism (e.g., mandatory reporting, complaint-driven reporting) for learning about excavation damage to underground facilities.”<sup>4</sup>

In sum, we believe that PHMSA has the statutory authority to use mandatory reporting as a prerequisite to certification and compliance and that PHMSA has already demonstrated the importance of comprehensive reporting requirements in the Code of Federal Regulations.

### **Proposal**

#### a. Proposed Amendment Text to 49 CFR Section 198.55

Proposed amendment language denoted in italics and strikethrough below.

#### **§ 198.55 What criteria will PHMSA use in evaluating the effectiveness of State damage prevention enforcement programs?**

*(a) PHMSA will use the following mandatory minimum threshold requirements to evaluate the effectiveness of a State damage prevention program:*

*(1) Does the State or its enforcement authority (if one exists) have a mandatory incident reporting requirement for learning about damages to underground facilities?*

*(2) Has the State designated a State agency or other body as the authority responsible for receiving the reports required under subsection (1), categorizing these reports by incident cause and responsible party, documenting each report and making the full database of reports available to the general public?*

---

<sup>3</sup> 49 U.S.C. Section 60114(d)(3).

<sup>4</sup> 49 C.F.R. 198.55

(b)(a) PHMSA will use the following criteria to evaluate the effectiveness of a State excavation damage prevention enforcement program:

(1) Does the State have the authority to enforce its State excavation damage prevention law using civil penalties and other appropriate sanctions for violations?

(2) Has the State designated a State agency or other body as the authority responsible for enforcement of the State excavation damage prevention law?

(3) Is the State assessing civil penalties and other appropriate sanctions for violations at levels sufficient to deter noncompliance and is the State making publicly available information that demonstrates the effectiveness of the State's enforcement program?

~~(4) Does the enforcement authority (if one exists) have a reliable mechanism (e.g., mandatory reporting, complaint-driven reporting) for learning about excavation damage to underground facilities?~~

(5) Does the State employ excavation damage investigation practices that are adequate to determine the responsible party or parties when excavation damage to underground facilities occurs?

(6) At a minimum, do the State's excavation damage prevention requirements include the following:

(i) Excavators may not engage in excavation activity without first using an available one-call notification system to establish the location of underground facilities in the excavation area.

(ii) Excavators may not engage in excavation activity in disregard of the marked location of a pipeline facility as established by a pipeline operator.

(iii) An excavator who causes damage to a pipeline facility:

(A) Must report the damage to the operator of the facility at the earliest practical moment following discovery of the damage; and

(B) If the damage results in the escape of any PHMSA regulated natural and other gas or hazardous liquid, must promptly report to other appropriate authorities by calling the 911 emergency telephone number or another emergency telephone number.

(7) Does the State limit exemptions for excavators from its excavation damage prevention law? A State must provide to PHMSA a written justification for any exemptions for excavators from State damage prevention requirements. PHMSA will make the written justifications available to the public.

(c)(b) PHMSA may consider individual enforcement actions taken by a State in evaluating the effectiveness of a State's damage prevention enforcement program.

#### b. Description of Proposal

The Petitioners support the current excavation damage prevention regulations in 49 C.F.R. Section 198, especially the provision requiring annual state certification for state programs seeking grant funds, including the requirements to achieve certification, and the provision outlining the factors to be considered should PHMSA choose to initiate an enforcement proceeding. However, the Petitioners request that rather than using mandatory reporting as a factor in determining the strength of a given states program, PHMSA promulgate a new regulation explicitly mandating that each state put in place a requirement that all excavators performing work within their jurisdiction report any incident occurring during excavation regardless of the size and scope of the incident's initial safety, economic, or environmental impacts.

Further, petitioners request that each state be required to assign a single entity to receive such reports, whether run by government, a quasi-governmental organization, a non-profit entity, or a private sector business. This entity should be required to acknowledge, categorize, and document each submission. Finally, the entity should make a database of all incidents available to the public to raise awareness about the frequency of incidents, where they occur, and the leading causes. This information is critical to any comprehensive effort to objectively identify root causes and combat them through smarter rules and regulations.

#### **Support for Proposed Action**

According to your administration's (PHMSA) website, "excavation damage continues to be a leading cause of pipeline incidents."<sup>5</sup> Your site goes on to state, "pipeline incidents caused by excavation damage can result in fatalities and injuries, as well as significant costs, property damages, environmental damages, and unintentional fire or explosions."<sup>6</sup> The Petitioners agree, and assert that PHMSA has an opportunity and a responsibility to ensure the states they oversee are doing everything possible to identify the primary causes, locations, and other variables resulting in excavation damage incidents to inform future approaches to more effective damage prevention programs.

After reviewing all available data, the Petitioners found the Common Ground Alliance's (CGA) Damage Information Reporting Tool (DIRT) report to be the most comprehensive. However, in using that data to determine year-to-year incident trends and identify correlations between the strength of state laws and regulations with incident rates, we found that the data available was not sufficient to draw any firm conclusions for two primary reasons.<sup>7</sup>

---

<sup>5</sup> U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, "[Damage Prevention](#)," Accessed on August 11, 2016.

<sup>6</sup> Ibid.

<sup>7</sup> A thorough analysis of the data included in this report is attached as Exhibit A.

First, the annual incident rates are estimated using relatively weak predictive modeling that makes it nearly impossible to determine if the rate of incidents is worsening or improving. For example, DIRT estimates that there were approximately 349,000 events in 2014 compared to an estimated 335,000 in 2013 – a 14,000 incident increase – despite the fact that there were 273,599 incidents reported in 2014, and increase of 48,983 from 2013.<sup>8</sup> So, the model determined that even though there were nearly 50,000 more incidents reported, only 14,000 more incidents actually occurred, and that 78 percent of the incidents that occurred were actually reported, which is difficult to substantiate.

Second, mandatory reporting at the state level would allow for a direct comparison in state-to-state incident rates. DIRT data is broken down geographically into nine U.S. regions (Canada is also included in the data, becoming the 10<sup>th</sup> region), but not by state. Regional comparisons are valuable from a geographic perspective, but state breakdowns would be more valuable in identifying other trends unrelated to geography. For example, better state level data would allow for a more thorough comparison of which laws, regulations and best practices demonstrate a direct correlation with low incident rates compared to states with less stringent standards.

None of this is intended to criticize CGA's efforts. These reports are a large undertaking and serve as the best data set available to policy makers and other interested parties. The Petitioners submit that if the mandatory reporting requirements requested in this petition were in place, CGA and others would have access to complete data sets and could perform stronger analysis and draw firmer conclusions without needing to rely on regression models and regional comparisons to attempt to identify trends and correlations. Allowing subjective reporting or requiring reporting under only certain circumstances necessarily leads to a skewed data set.

## **Conclusion**

More comprehensive statistics on excavation damage incidents would go a long way in identifying how to improve state damage prevention programs, and consequently reducing the likelihood of these incidents. PHMSA has the legal authority to make mandatory incident reporting a required element in state damage prevention programs and has acknowledged in regulation the benefits of mandatory reporting. The Petitioners respectfully request, for all of the reasons provided herein, that PHMSA take the additional step of explicitly mandating that each state put in place a requirement that all excavators performing work within their jurisdiction report any incident occurring during excavation regardless of the size and scope of the incidents initial safety, economic, or environmental impacts.

---

<sup>8</sup> Common Ground Alliance, *Damage Information Reporting Tool, Volume 11*, September 8, 2015.