



# **Working with Other Stakeholders to Advance Pipeline Safety in Damage Prevention**

*A Publication for AGA Members*

Prepared by the AGA Excavation Damage  
Prevention Executive Task Force  
400 North Capitol St., N.W., Suite 450  
Washington, DC 20001  
U.S.A.  
Phone: (202) 824-7000  
Fax: (202) 824-7082  
Web site: [www.aga.org](http://www.aga.org)

*January 2023*

Copyright © 2023 American Gas Association

All Right Reserved

## DISCLAIMER AND COPYRIGHT

The American Gas Association's (AGA) Operations and Engineering Section provides a forum for industry experts to bring their collective knowledge together to continuously improve the areas of operating, engineering and technological aspects of producing, gathering, transporting, storing, distributing, measuring and utilizing natural gas.

Through its publications, of which this is one, AGA provides for the exchange of educational information within the natural gas industry and scientific, trade and governmental organizations. Many AGA publications are prepared or sponsored by an AGA Operations and Engineering Section technical committee. While AGA may administer the process, neither AGA nor the technical committee independently tests, evaluates or verifies the accuracy of any information or the soundness of any judgments contained therein.

AGA disclaims liability for any personal injury, property or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from the publication, use of or reliance on AGA publications. AGA makes no guaranty or warranty as to the accuracy and completeness of any information published therein. The information contained therein is provided on an "as is" basis and AGA makes no representations or warranties including any expressed or implied warranty of merchantability or fitness for a particular purpose.

In issuing and making this document available, AGA is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is AGA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. Information on the topics covered by this publication may be available from other sources, which the user may wish to consult for additional views or information not covered by this publication.

AGA has no power, nor does it undertake, to police or enforce compliance with the contents of this document. Nor does AGA list, certify, test or inspect products, designs or installations for compliance with this document. Any certification or other statement of compliance is solely the responsibility of the certifier or maker of the statement. Any reference to trade names or specific commercial products, methods, commodities or services in this document does not represent or constitute an endorsement, recommendation or favoring nor disapproval, disparagement or disfavoring by AGA or any other person of the specific commercial product, commodity or service.

AGA does not take any position with respect to the validity of any patent rights asserted in connection with any items that are mentioned in or are the subject of AGA publications, and AGA disclaims liability for the infringement of any patent resulting from the use of or reliance on its publications. Users of these publications are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Users of this publication should consult applicable federal, state and local laws and regulations. AGA does not, through its publications intend to urge action that is not in compliance with applicable laws, and its publications may not be construed as doing so.

Changes to this document may become necessary from time to time. If changes are believed appropriate by any person or entity, such suggested changes should be communicated to AGA in writing and sent to:

***Operations & Engineering Section, American Gas Association, 400 North Capitol Street, NW, 4<sup>th</sup> Floor, Washington, DC 20001, U.S.A. Suggested changes must include: contact information, including name, address and any corporate affiliation; full name of the document; suggested revisions to the text of the document; the rationale for the suggested revisions; and permission to use the suggested revisions in an amended publication of the document.***

*Copyright © 2023, American Gas Association, All Rights Reserved*

Excavation damage continues to be a leading threat to pipeline safety. In addressing this threat, operators must have a rigorous damage prevention program which can help reduce the potential of an incident from occurring. Although a rigorous program does not ensure a company will prevent all excavation damages, it can be effective in reducing the potential for a serious incident from occurring. Utilities should take actions to continually strengthen their internal processes which enable them to provide accurate, timely locates in response to One Call tickets submitted by excavators. The ideal approach in avoiding excavation damages is for operators to work with stakeholders to promote 811, work diligently to provide high-quality locates to excavation notices, and pursue improvements that address the root causes of damages. Notably, there are many factors impacting the frequency of excavation damages to pipelines that are often not within the direct control of the natural gas utility. Some of these factors are tied to the requirements and One Call parameters mandated by a state's damage prevention law. For example, one factor is the level of enforcement a state authority has over non-compliant individuals and the effectiveness of any penalties imposed upon parties who violate the state damage prevention law.

Each state has its own unique damage prevention law (or "dig law") which establishes the requirements for facility owners, excavators, and the protocols defining how One Call is managed. Significant improvement has occurred over the past 20-25 years in reducing damages, but more can be done to help operators manage problematic excavators. Operators rely heavily on the state's enforcement authority to oversee the actions of excavators, particularly professional contractors who may be working for another utility provider, a municipality, or a private entity. Homeowners represent a unique challenge in the effort to reduce excavation damage since many states provide some form of exemption to homeowners and/or the type of digging frequently performed on their own property. In 2015, PHMSA released a final rule that established the process for evaluating state excavation damage prevention programs and enforcing minimum Federal damage prevention standards in states determined to have an "inadequate" damage prevention program.<sup>1</sup> Of note, Federal funding can be reduced for states who continue to have an inadequate damage prevention program. This has resulted in some marked improvement in the dig law for states which have historically had ineffectual provisions in damage prevention.

Those states with stronger and more consistent enforcement generally result in a lower frequency of excavation damages caused to pipelines. In addition to enforcement, there are several other characteristics that serve to provide the foundation of any state's dig law. This white paper seeks

---

<sup>1</sup> <https://www.phmsa.dot.gov/pipeline/excavator-final-rule/about-excavation-enforcement-final-rule>

to identify the core components of an effective dig law deemed as critical for natural gas operators. When included in a state's dig law, these core components can help increase accountability and enhance public safety by reducing excavation damages. Furthermore, this white paper seeks to identify some common trends among these 12 core components in the states that have the most effective excavation damage prevention programs based on damage data reported to PHMSA. State legislation generally contains a wide range of requirements for the dig law, and it is often reflected by language that could be interpreted in different ways. The legislation sets the parameters for how the One Call System is designed and managed in each state.

A task force comprised of AGA member executives evaluated the components in each state's dig law and sought to identify trends and elements in legislative language and regulatory schemes that are common to the states with the lowest excavation damage rate for natural gas pipelines. The intent of the white paper is to identify effective language currently incorporated in state dig laws which can foster an environment where requirements are clearly stated, accountability is established, and utility lines can be marked in a reasonable timeframe for the pending excavation activity.

## **State Performance**

The task force evaluated those states which have the lowest excavation damage rate for natural gas pipelines during the 2017-2021 period. The data was pulled from the PHMSA website where gas distribution operators annual report information is saved: <https://www.phmsa.dot.gov/data-and-statistics/pipeline/gas-distribution-gas-gathering-gas-transmission-hazardous-liquids>

In the gas industry, a common metric used to report damage rate has historically been total excavation damages per 1,000 One Call tickets. Although this is the metric used by the task force to highlight the leading states, the task force acknowledges that any metric used to compare state damage performance is imperfect, due to a variety of factors, including:

- The lack of a universal standard for what constitutes an 811 ticket, which is often used as the metric that normalizes digging activity experienced from year to year *and* from operator to operator. This results in differences in One Call requirements for scope and longevity of a ticket, greatly impacting what is reported by an operator based on the "number" of tickets it receives.

- The lack of a universal definition of what constitutes an “excavation damage”, which can result in certain types of events that may or may not be categorized as a damage, depending on how an operator defines it and collects that information; and
- The inherent differences that impact how any company counts its own 811 tickets which may vary based on arrangements with One Call Centers and its own practices.

**Leading States for Gas Excavation Damages per 1,000 One Call Tickets\***

	2017	2018	2019	2020	2021
<b>AZ</b>	1.16	1.11	0.99	0.95	0.79
<b>CT</b>	1.47	1.27	1.18	1.46	1.48
<b>IN</b>	1.86	1.71	1.69	1.73	1.61
<b>MD</b>	1.09	0.94	0.96	0.94	0.82
<b>NE</b>	1.58	1.67	1.76	1.73	1.69
<b>NY</b>	1.56	1.62	1.42	1.52	1.34
<b>VA</b>	1.09	0.97	0.99	0.94	0.97
<b>WI</b>	1.6	1.68	1.69	1.59	1.59
<b>NH</b>			1.88	1.48	1.25
<b>VT</b>			1.57	1.91	1.18
<b>MA</b>			1.84	1.91	1.47
<b>CO</b>			1.95		1.89
<b>ME</b>			1.53		1.57
<b>NC</b>				1.86	
<b>CA</b>			1.98		1.69
<b>NJ</b>					1.94
<b>NV</b>					1.88
<b>OK</b>					1.85
<b>WV</b>		1.93			
<b>Average for all States</b>	<b>2.75</b>	<b>2.67</b>	<b>2.56</b>	<b>2.52</b>	<b>2.37</b>

*\*based on PHMSA gas distribution operators annual report data 2017-2021, only states with excavation damage rates below 2.0 are shown; shaded boxes represent years with a rate above 2.0<sup>2</sup>*

Eight states experienced gas damages rates below 2.0 for each of the five years. 11 other states had gas damage rates below 2.0 for at least one year between 2017 and 2021.

<sup>2</sup> Additional information on gas damage rates across the United States is available via Common Ground Alliance’s report at: <https://www.cga-dirt.com/dr/control/analysis.do#reports-anchor>

The task group collected key information on each state's dig law requirements which correspond to the 12 core components. The information is captured in Attachment 1.

When reviewing Attachment 1, please note the following:

- The above eight states experiencing a lower damage rate for gas pipelines have been highlighted in **blue** in the attachment.
- The language for each component reflecting the preferred starting point for model legislation is highlighted in **yellow**.
- Each state's information is only an excerpt from its dig law. The entire language is accessible at the weblink provided in the table.
- The task force reviewed each state's dig law during the second and third quarter of 2022. Operators should consult their applicable state legislation or regulation in order to obtain the most current version of any state's dig law.

## **12 Core Components of the State Dig Law**

### **1. Maximum Size or Scope of One Call Ticket**

Ticket size needs to be reasonable to balance the workload with the resources needed to locate it. Without any restrictions, utilities are left to work with excavators who may submit tickets that cannot be located in a reasonable timeframe or within required statute or state law. Furthermore, the limitations of scope should be simple enough so that users understand them and readily identify instances where excavators may exceed the limitations when they initiate their ticket.

The challenge is: (1) encouraging people to call in their excavation projects and (2) designing the system so that 811 tickets reflect excavations that will be completed and that will match the parameters for the work reflected on the ticket. Since there is no cost to generating a ticket, there can be an excess of tickets initiated that won't materialize as an actual excavation. There may also be tickets submitted that require excessive locates to be provided beyond what is actually needed, and large tickets called in that are updated even after some or all the work is completed. There should be clear boundaries established that all stakeholders follow when calling in a ticket, as well as repercussions for those who misuse and/or abuse the system.

Example language from states that effectively establish an appropriate size and scope in their dig laws include:

[Arizona:](#)

*An excavator shall limit the request to an area that can reasonably be excavated within the validity period of the markings.*

[Kentucky:](#)

*The excavation or demolition site location shall not exceed 2,000 feet in length unless the excavator and operator agree to a larger area.*

[Tennessee:](#)

*Not to exceed two thousand feet (2,000') in length unless an excavator and an operator or an operator's designated representative, such as a one - call service, agree to a larger area.*

[Pennsylvania:](#)

*1,000' or Intersection to Intersection, whichever is greater, along the same street, within the same political subdivision*

2. Longevity of One Call Ticket

The longevity of a One Call ticket must be defined so that each 811 ticket has a finite duration. Upon expiration, the ticket must be renewed, or a new ticket created, if needed. Too long of a period leads to potential problems with “stale” locates. Too short of a period leads to an influx of refresh tickets that must be performed when the ticket expires.

The task force suggests a specified ticket duration that would be defined between 14 days to 28 days. The following states feature either 14 or 15 calendar days or working days:

[Arizona](#), [Kansas](#), [Minnesota](#), [Mississippi](#), [New Mexico](#), [North Carolina](#), [Oklahoma](#), [South Carolina](#), [Tennessee](#), [Texas](#), [Utah](#), [Virginia](#) and [Wyoming](#).

The following states feature either 20-21 calendar days or working days:

- [Alabama](#)
- [Arkansas](#)
- [Idaho](#)
- [Indiana](#)
- [Kentucky](#)
- [Louisiana](#)
- [Michigan](#)

- [North Dakota](#)
- [South Dakota](#)

The following states feature either 28 calendar days or working days:

[California](#), [Hawaii](#), [Nevada](#), [Illinois \(outside of Chicago\)](#) and [Illinois \(Chicago only\)](#)

### 3. Tolerance Zone Definition and Dimension

An effective dig law should also clearly establish the dimensions of a tolerance zone. Importantly, this zone establishes the corridor in which hand-digging (sometimes called ‘soft digging’) is required and mechanized equipment is forbidden. There is a fundamental connection between the tolerance zone and the expected accuracy of the markings provided by the gas company locator. The task force’s suggestion is 24 inches, and there is generally language that suggests it would be applied from the outer edge of the pipeline, horizontally to either side. Nuances exist within statutory language on how the dimension is applied, including if depth is potentially included. States that are silent on the tolerance zone component are viewed as having the least desired position. Examples of states with 24 inches established:

#### [Tennessee:](#)

*A strip of land at least four feet (4') wide, but not wider than the width of the facility plus twenty-four inches (24") on either side*

#### [North Carolina:](#)

*If the diameter of the facility is known: the distance of one-half of the known diameter plus 24 inches on either side of the designated center-line.*

*If the diameter of the facility is not marked: 24 inches on either side of the outside edge of the mark indicating a facility or, for subaqueous (underwater) facilities, a clearance of 15 feet on either side of the indicated facility.*

### 4. Tolerance Zone Application for Excavation

The excavator should be responsible for finding the utility line and ensuring safe excavation around the facility with little or no impact on or involvement of the utility operator. The legislative language should be clear and explicit for all to understand and make distinctions between requirements and suggested practices. This is considered a separate component from the actual dimension and scope of the tolerance zone referenced above. States that are silent on this



component have an opportunity to strengthen their existing dig laws by clarifying or including this component in their dig laws. Examples of effective legislative language included in state excavation statutes include:

Indiana:

*If the clearance is less than two (2) feet, an excavator must use:*

- *Hand excavation;*
- *Air cutting;*
- *Vacuum excavation; or*
- *Hydro-vacuum excavation.*

*Mechanized equipment may not be used within the two (2) feet tolerance zone on either side of the outer limits of the underground facility unless the person responsible for the excavation:*

- *Visually identifies the precise location of the underground facilities, or visually confirms that no facility is present within the depth of the excavation;*
- *Takes reasonable precautions to avoid any substantial weakening of the underground facilities' structural or lateral support;*
- *Takes reasonable precautions to avoid penetration or destruction of the underground facilities, including their protective coatings; and*
- *Requires an individual other than the equipment operator to visually monitor the excavation activity.*

*Mechanized equipment may be used for the initial penetration and removal of pavement or other manmade hard surfaces if pavement or another manmade hard surface extends up to two (2) feet from either side of the outer limits of the underground facility, subject to the following:*

- *The person responsible for the excavation or demolition must plan the excavation to avoid damage to or minimize interference with the underground facilities;*
- *The person responsible for the excavation or demolition must take into account the known limits of control of the mechanized equipment's cutting edge or point; and*
- *The mechanized equipment may be used only to the depth necessary to remove the pavement or other manmade hard surface.*

Virginia:

*A. Any person excavating within two feet on either side of the staked or marked location of an operator's underground utility line or demolishing in such proximity to an underground utility line that the utility line may be destroyed, damaged, dislocated or disturbed shall take all reasonable steps necessary to properly protect, support and backfill underground utility lines. For excavations not parallel to an existing underground utility line, such steps shall include, but may not be limited to:*

- 1. Exposing the underground utility line to its extremities by hand digging;*
- 2. Not utilizing mechanized equipment within two feet of the extremities of all exposed utility lines; and*

3. *Protecting the exposed utility lines from damage.*

*In addition, for excavations parallel to an existing utility line, such steps shall include, but may not be limited to, hand digging at reasonable distances along the line of excavation. The excavator shall exercise due care at all times to protect underground utility lines when exposing these lines by hand digging.*

*VAC § 20VAC5-309-140. Any person excavating around underground utility lines shall take all reasonable steps to protect such utility lines. These steps shall include, but are not limited to, the following:*

- 1. The excavator shall plan the excavation in such a manner to avoid damage to, and minimize interference with, underground utility lines in and near the construction area;*
- 2. The excavator shall expose the underground utility line to its extremities by hand digging within the excavation area when excavation is expected to come within two feet of the marked location of the underground utility line;*
- 3. The excavator shall not utilize mechanized equipment within two feet of the extremities of all exposed utility lines;*
- 4. The excavator shall maintain a reasonable clearance, to include the width of the utility line, if known, plus 24 inches, between the marked or staked location of an underground utility line and the cutting edge or point of any mechanized equipment, considering the known limit of control of the cutting edge or point to avoid damage to the utility line;*
- 5. The excavator shall provide proper support for underground utility lines during excavation activities....*

[New York:](#)

*Before using powered equipment within the tolerance zone, the locations of underground utility lines MUST be verified by means of hand-dug test holes. Locations of other utilities may be verified in this manner, or by other means mutually agreed to with the operator. Powered equipment may be used for removal of pavement, ONLY to the depth of pavement. Hand excavation must be utilized below the pavement to locate and expose the facility. If the facility cannot be located after diligent search at a reasonable depth, the excavator is required to notify the operator for assistance.*

[California:](#)

*(a) (1) Except as provided in paragraph (2), if an excavation is within the tolerance zone of a subsurface installation, the excavator shall determine the exact location of the subsurface installations in conflict with the excavation using hand tools before using any power-driven excavation or boring equipment within the tolerance zone of the subsurface installations. In all cases the excavator shall use reasonable care to prevent damaging subsurface installations.*

*(2) (A) An excavator may use a vacuum excavation device to expose subsurface installations within the tolerance zone if the operator has marked the subsurface installation, the excavator has contacted any operator whose subsurface installations may be in conflict with the excavation, and the operator has agreed to the use of a vacuum excavation device. An excavator shall inform the regional notification center of their intent to use a vacuum excavation device when obtaining a ticket.*

*(B) An excavator may use power-operated or boring equipment for the removal of any existing pavement only if there is no known subsurface installation contained in the pavement.*

Colorado:

*When a person excavates within eighteen inches horizontally from the exterior sides of any marked underground facility, the person shall use nondestructive means of excavation to identify underground facilities and shall otherwise exercise reasonable care to protect any underground facility in or near the excavation area. When utilizing trenchless excavation methods, the excavator shall expose underground facilities and visually observe the safe crossing of marked underground facilities when requested to do so by the underground facility owner or operator or the government agency that issued a permit for the excavation.*

## 5. How “Emergency” is Defined for Applicability to an Excavation

Most states generally have similar requirements with regards to emergency notification response. However, there are some states where the operator is exempt from making the emergency notification when working over their own facility for an urgent repair. This exemption should be revised, requiring any operator to generate an emergency One Call ticket even when excavating on its own facility. An emergency ticket provides a notification to all 811 members that they should mark their own facilities. Typically, there is a two-hour (or other short, specific) duration defined when the emergency excavation will occur.

Some states may connect this Emergency excavator definition to the responsibility of an operator to mark its facilities in an expedited manner with the ability of an excavator to move forward with an excavation without having to wait the requisite time for markings to be provided. Gas utilities are often the excavator generating an emergency ticket for immediate action leaks, that could be precipitated by an excavation damage or a material condition leak. Although not listed below, note that Indiana has a civil penalty for an excavator that reports a “false emergency” of \$1,000 per occurrence. An effective and comprehensive dig law should include repercussions and accountability for misrepresenting an excavation as an emergency. Examples of states that clearly and effectively define “emergency” in their dig laws include:

Alabama:

*EMERGENCY EXCAVATION or DEMOLITION. An excavation or demolition that is required to eliminate an imminent danger to life, health, property, or the environment or required for the repair or restoration of operator service that is required to be performed before the notification and response procedures required in Sections 37-15-4 and 37-15-6 may be fully utilized.....§37-15-7. Emergency Excavation or Demolition(a) Compliance with the notice requirements of Section 37-15-4 is not required of persons responsible for emergency excavation or demolition; provided, however, that such person gives, before commencing or as soon as practicable thereafter, notice of the emergency excavation or demolition to each operator having underground facilities located in the area or to the "One-Call Notification System" acting on behalf of the operator. However, every person who shall engage in such emergency excavation or demolition shall take all necessary and reasonable precautions to avoid or minimize damage to existing underground facilities. (b) An excavator misrepresenting an emergency excavation or demolition is subject to the civil penalties imposed pursuant to Section 37-15-10.*

Virginia:

*"Emergency" means a sudden or unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.*

New York:

*Emergency as defined in 753-1.2 (h): Any abnormal condition which presents an immediate danger to life or property including the discontinuance of a vital utility service necessary for the maintenance of public health, safety, and welfare.*

*Excavator Requirements for Emergency Excavations as noted in 753-3.1 (b):*

*Excavation or demolition which is required to be performed promptly as a result of an emergency, disaster or to correct an immediate hazard may proceed immediately without prior notification to operators, if the situation is so serious that the excavation or demolition cannot reasonably be delayed. However, excavators shall notify the one-call notification system as soon as possible that such excavation or demolition is commencing or is underway. Extreme caution shall be employed by the excavator to prevent damage to existing underground facilities and to avoid endangering persons and property.*

*[Emergency Service requirements of the Operator as noted in 753-4.11 (a):*

*Each operator of an underground facility containing gas or liquid petroleum products shall provide means for accepting emergency calls and prompt field assistance to such calls on a 24 hour per-day basis.*

*Operators are required to respond to the Emergency notifications as soon as possible.]*

[Pennsylvania:](#)

*"Emergency" means a sudden or unforeseen occurrence involving a clear and immediate danger to life, property and the environment, including, but not limited to, serious breaks or defects in a facility owner's lines.*

## 6. Responsibilities of an Excavator (Including the Reporting of a Damage)

The language in most state dig laws is broad and represents the list of tasks associated with conducting an excavation and actions required if a damage occurs. Importantly, the “excavator” or “excavation” definition is typically what determines applicability of the dig law for those who perform work that can potentially result in a damage to an underground facility (exemptions to these requirements are addressed under Component 7, below).

- The task force reviewed the applicable dig laws of all 50 US states and determined that the following seven states provide examples of statutory language that clearly and comprehensively explains the responsibilities of an excavator in their dig laws: [California](#), [Virginia](#), [Missouri](#), [Oregon](#), [Nevada](#), [Nebraska](#) and [Oklahoma](#). Example statutory language from these seven states is provided below and is organized into seven categories in order to help identify the key areas that should be covered by this core component:

i) Definition of Excavator:

- *“Excavation” means any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way....*  
*“excavator” means any person, firm, contractor or subcontractor, owner, operator, utility, association, corporation, partnership, business trust, public agency, or other entity that, with their own employees or equipment, performs any excavation.*

ii) Action to Protect:

- *Excavator shall take all reasonable steps necessary to properly protect, support and backfill underground utility lines.*
- *For excavations not parallel to an existing underground utility line, such steps shall include, but may not be limited to: 1. Exposing the underground utility lines to its*

*extremities by hand digging; 2. Not utilizing mechanized equipment within two feet of the extremities of all exposed utility lines; and 3. Protecting the exposed utility lines from damage.*

- *Once underground facilities have been marked, the excavator must: (a) Maintain marks during the excavation period to ensure that the original marks remain effective for the life of the project or the ticket life, whichever is the shorter period; (b) Stop excavating in the vicinity of the underground facility and notify the Oregon Utility Notification Center to have the route remarked as specified in these rules, if prior to or during the excavation process, the marking or route of any underground facility is removed or no longer visible; and (c) Employ hand tools or other non-invasive methods either to determine the exact location of the underground facility or down to 24 inches beyond the depth of intended excavation within 24 inches of the outside dimensions of a marked underground facility.*
- *The excavator must provide such lateral and subjacent support for underground facilities as may be reasonably necessary for the protection of such facilities.*
- *When excavating using horizontal directional drilling, the excavator must visually monitor the drill head and back reamer pass through the tolerance zone.*
- *Before an excavator shall demolish a structure, discharge any explosive or commence to excavate in a highway, street, alley or other public ground or way, on or near the location of an operator's underground facilities, or a private easement, such excavator shall first notify all operators in the geographic area defined by the notification center who have on file with the notification center a notice to determine whether any operators have underground facilities in or near the proposed area of excavation or demolition.*
- *When an excavator has actual knowledge that an operator has unmarked hydrocarbon and hazardous liquid underground facilities within the area of proposed excavation, the excavator shall not commence excavation or demolition until notice has been given and such facilities have been marked.*

iii) Halt/Do Not Proceed:

- *If, upon arrival at the site of a proposed excavation, the excavator observes clear evidence of the presence of an unmarked utility line in the area of the proposed excavation, the excavator shall not begin excavating until an additional call is made to the notification*
- *An excavator must check for positive response at the notification center prior to excavating or demolishing to ensure that all operators have responded and that all facilities that may be affected by the proposed excavation or demolition have been marked.*

iv) If Damage Occurs:

- *In the event of any damage to, or dislocation, or disturbance of any underground utility line including its appurtenances, covering, and coating, in connection with any excavation or demolition, the person responsible for the excavation or demolition operations shall immediately notify the operator of the underground utility line and shall not backfill around the underground utility line until the operator has repaired the damage or has given clearance to backfill.*

- *The excavator shall immediately contact 911 when any damage or contact with a pipeline results in a release from the pipeline of hazardous liquid or gas to occur.*
- *If the excavator causes or observes damage to underground facilities, the excavator must notify the operator of the underground facilities immediately. If the damage causes an emergency, or if the damage from excavation activity is to a pipeline and causes the release of any natural gas, other gas, or hazardous liquid from the pipeline, the excavator must promptly report the release to appropriate emergency response authorities by calling the 911 emergency telephone number, and take reasonable steps to ensure the public safety.*
- *If any underground facility is damaged, dislocated, or disturbed before or during excavation, the excavator shall immediately notify the center. An excavator shall not conceal or attempt to conceal damage, dislocation, or disturbance of an underground facility and shall not repair or attempt to repair the underground facility unless authorized by the operator of the underground facility.*
- *An excavator shall be responsible for damage to the underground facilities of an operator if the notification center was not notified.*

v) Facility Repair:

- *An excavator shall delay any backfilling in the immediate area of the damaged underground facilities until the damage has been repaired, unless the operator authorizes otherwise. The repair of such damage must be performed by the operator or by qualified personnel authorized by the operator.*

vi) Concealment/Permission:

- *In the event of any damage, dislocation, or disturbance to any underground facility, the person responsible for the excavation operations shall not conceal or attempt to conceal such damage, dislocation, or disturbance, nor shall that person attempt to make repairs to the facility unless authorized by the underground facility owner.*

vii) Unreasonable Locate Scope:

- *If excessive and unreasonable requests for marking are made by an excavator when no excavation is taking place within fourteen (14) calendar days, the excavator may be liable to the owner or operator for the reasonable cost of such marking.*

## 7. Exemptions or the Definition of “Excavator” / “Excavation”

Public safety is generally diminished when individuals are allowed to dig without having a One Call ticket. It can also help encourage and enable actions and behaviors that contradict the mantra of “Call Before You Dig”. Exemptions have historically been allowed for parties who are either digging on privately owned property, state or local municipalities, or those who are doing work that is considered as having “minimal” risk in possibly damaging a utility line.

For state dig laws, exemptions generally appear in two ways:

- I. Definition of excavator or excavation which considers certain forms of digging to be excluded based on their minimal ground disturbance; or
- II. The geographic location of where an excavation is happening allows an exclusion (i.e., state highway, cemetery, homeowner property, farming land, etc.)

The natural gas industry believes there is a need for exemptions for an emergency situation that represents a clear and imminent threat to public safety (see Component 5, above). The gas industry is generally opposed to exemptions for the installation of ground rods or guy wire anchors that are often used by utilities who are above-ground. There have been tragic incidents involving gas migration resulting from gas lines damaged by this type of work, which some mistakenly believe has no risk to public safety. Two examples are the incidents occurring in Murrieta, CA on July 15, 2019<sup>3</sup> and Huntington, IN on November 20, 2006.

The task force has identified Oregon, Pennsylvania, Louisiana, and North Dakota as states with statutory language that appear most effective in limiting the availability of exemptions for the excavator notification requirements in state dig laws:

[Oregon:](#)

*"Excavation" does not include the tilling of soil for agricultural purposes conducted on private property that is not within the boundaries of a recorded right-of-way or easement for underground facilities."*

[Pennsylvania:](#)

*A one call is always recommended but is NOT required for:*

*Soft excavation technology such as vacuum, high pressure air or water, tilling of soil for agricultural purposes to a depth of less than eighteen inches, performing minor routine maintenance up to a depth of less than eighteen inches measured from the top of the edge of the cartway or the top of the outer edge of an improved shoulder, in addition to the performance of incidental de minimis excavation associated with the routine maintenance and the removal of sediment buildup, within the right-of-way of public roads or work up to a depth of twenty-four inches beneath the existing surface within the right-*

---

<sup>3</sup> [https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc\\_public\\_website/content/safety/natural\\_gas\\_pipeline/citations\\_issued/enclosure-1-sed-report-redacted.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/safety/natural_gas_pipeline/citations_issued/enclosure-1-sed-report-redacted.pdf)



*of-way of a State highway, work performed by persons whose activities must comply with the requirements of and regulations promulgated under the act of May 31, 1945 (P.L.1198, No.418), known as the Surface Mining Conservation and Reclamation Act, the act of April 27, 1966 (1st Sp.Sess., P.L.31, No.1), known as The Bituminous Mine Subsidence and Land Conservation Act, or the act of September 24, 1968 (P.L.1040, No.318), known as the Coal Refuse Disposal Control Act, that relate to the protection of utility facilities or the direct operations on a well pad following construction of the well pad and that are necessary or operations incidental to the extraction of oil or natural gas. 73 P.S. § 176.*

Louisiana:

*A One call is always recommended, but is not required for Manual probing. Excavation being conducted by operators or land owners excavating their own underground facilities on their own property or exclusive right of way, providing there is no encroachment on the right of way of another operator*

North Dakota:

*ND CenCode § 49-23-01. ... 7. Excavation means.... The term does not include: a. Opening a grave in a cemetery. b. Plowing, cultivating, planting, harvesting, and similar operations in connection with agricultural activities, unless any of these activities disturbs the soil to a depth of eighteen inches [45.72 centimeters] or more. c. Gardening and landscaping unless it disturbs the soil to a depth of twelve inches [30.48 centimeters] or more. d. Normal maintenance of roads and streets if the maintenance does not change the original grade and does not involve the road ditch. e. Normal repair and maintenance of track and track bed by a railroad on its own right of way.*

*§ 49-23-04. 1. Except in an emergency, an excavator shall contact the notification center and provide an excavation or location notice....*

## 8. White-Lining

The task force believes that an effective and comprehensive state dig law must include language outlining the practice of “white-lining”. The most effective legislative language should specify the responsibilities of an excavator in delineating the boundaries of where they will be working. Additionally, there should be specificity on how this is accomplished, either electronically or physically. Generally, white-lining is done with the use of markings that demonstrate the area that must be marked by any facility owner. These markings would presumably only be identifiable when at the excavation site. Electronic or digital white-lining typically features GPS coordinates and/or the use of digital maps where a planned excavation can be outlined or documented. The One Call Center has a critical function in ensuring the success of any process that features any

form of white-lining. The Common Ground Alliance website includes best practices on white-lining.<sup>4</sup>

The task force's analysis determined that the states with a lower rate of excavation damages include some form of a requirement that excavators provide white-lining that provides a greater level of specificity on their dig area for utility providers. Additionally, many of these states also give consideration to large areas where physical white-lining is impractical due to the nature of the excavation site. Examples of states that include effective white-lining requirements in their dig laws include:

[Iowa:](#)

*At the time of giving notice to the notification center pursuant to this subsection, an excavator shall use white paint, white flags, white stakes, or a combination thereof, to mark the proposed area of excavation, unless one of the following applies:*

*(1) The precise location, direction, size, and length of the proposed excavation area can be clearly and adequately defined and described during the call to the notification center or during an onsite preconstruction meeting.*

*(2) Electronic means of white-lining is supported by the notification center and used by the excavator.*

[California:](#)

*4216.2. (a) Before notifying the appropriate regional notification center, an excavator planning to conduct an excavation shall delineate the area to be excavated. If the area is not delineated, an operator may, at the operator's discretion, choose not to locate and field mark until the area to be excavated has been delineated.*

[Virginia:](#)

*In the event a specific location of the excavation cannot be given as required by subdivision 2 of § 56-265.18, prior to notifying the notification center pursuant to subsection A of this section, the person proposing to excavate or demolish shall mark the route or boundary of the site of the proposed excavation or demolition by means of white paint, if practical.*

[Kansas:](#)

---

<sup>4</sup> <https://bestpractices.commongroundalliance.com/New-in-Version-190/502-Delineate-Area-of-Proposed-Excavation>

*66-1805(k) Upon request of the operator, the person filing the notice of intent to excavate shall whittleline the proposed excavation site prior to the locates being performed.*

## 9. Positive Response

Ideally, state dig laws should include a requirement for the utility placing the marks to positively respond and a requirement for the excavator to check the positive response before beginning the excavation. The excavator should always check for a positive response in order to confirm that all operators have either performed a locate or have indicated that they have no facilities in the area of excavation. It may also be appropriate to include an option from the operator to request or require that additional discussion or clarification on the work to be conducted. When implemented correctly, positive response can be an important part of the damage prevention process. The One Call Center plays a critical role in how it is managed. Some states that include exemplary language requiring positive response in their dig laws include Oklahoma, California, and New York.

### Oklahoma:

*Each operator shall provide a positive response to the notification center prior to the expiration of the required notice period. This response shall indicate the status of the required activities of the operator or designated representative in regard to the proposed excavation or demolition. An excavator must check for positive response at the notification center prior to excavating or demolishing to ensure that all operators have responded and that all facilities that may be affected by the proposed excavation or demolition have been marked.*

### California:

*Every operator shall supply an electronic positive response through the regional notification center before the legal excavation start date and time. Except in an emergency, an excavator planning to conduct an excavation shall notify the appropriate regional notification center of the excavator's intent to excavate at least two working days, and not more than 14 calendar days, before beginning that excavation. The date of the notification shall not count as part of the two-working-day notice. If an excavator gives less notice than the legal excavation start date and time and the excavation is not an emergency, the regional notification center will take the information and provide a ticket, but an operator has until the legal excavation start date and time to respond. However, an excavator and an operator may mutually agree to a different notice and start date. The contact information for operators notified shall be available to the excavator.*

New York:

*Operator's response to notice as noted in 753-4.5 (a) and (b):*

*(a) Prior to the stated commencement date of the excavation or demolition work as stated in the recorded notice, the operator shall make a reasonable attempt to inform the excavator, by means of an Automated Positive Response (APR) system, where available, or by means of direct communications with the excavator, where APR is not available, that either:*

*(1) The operator has no underground facility in or within 15 feet of the work area; or*

*(2) Every underground facility belonging to him or her which is located in or within 15 feet of the work area has been staked, marked or otherwise designated in accordance with the provisions of this Subpart.*

*(b) Where an operator cannot complete the staking, marking or other designation of an underground facility prior to the stated commencement date and time of the excavation or demolition, the operator shall promptly report such fact to the excavator and shall inform the excavator of a prompt and practicable completion date which in no case shall be more than two working days after the excavator's stated commencement date, unless a longer period is agreed to by both parties.*

*Excavator requirement prior to Commencement of excavation or demolition as noted in 753-3.3(d):*

*(d) Where available through the one-call notification system, the excavator shall utilize the Automated Positive Response (APR) system in order to obtain the response(s) of the operators that were notified by the one-call notification system.*

## 10. Newly Installed Underground Facilities

All underground facilities that are considered a "utility" should be locatable with a piece of equipment that is commercially available. The gas industry has advocated for all sewer lines and water lines to be locatable when they are installed, so that any individual can locate them in the future. Kentucky, North Carolina, and Missouri include such a requirement in their state dig laws.

Kentucky:

*All underground facilities installed after January 1, 2013, shall include a means to accurately identify and locate the underground facilities from the surface.*

North Carolina:

*All facilities installed by or on behalf of operators on or after the date this Article becomes effective shall be electronically locatable using a locating method that is generally accepted by operators in the particular industry or trade in which the operator is engaged*

Missouri:

*By January 1, 2016, if new lateral sewer pipes or water service lines are installed and connected to an underground facility within the public right-of-way, as defined in section 319.015 , or if such infrastructure is fully replaced by excavation within the public right-of-way, the facility owner shall be required to place tracer wire or other utility location technology and an access point within a protective enclosure over water lines and cleanouts for gravity sewer laterals. For sewer laterals operating under pressure or vacuum, the facility owner shall be required to place an access point within a protective enclosure and shall not be required to place a cleanout. All protective enclosures and cleanouts shall be extended to grade and installed so that it is easily accessible. For water service lines and sewer laterals operating under pressure or vacuum, tracer wire, or other utility location technology, shall be placed within the protective enclosure to provide approximate location of the underground facilities in these areas that are located within a public right-of-way. An underground facility owner shall not be liable to any party for damages or injuries resulting from an excavation if they are in compliance with this section. This section shall apply to all installations of water service lines and sewer laterals without regard to their status as underground facilities under section 319.015 . Nothing in this section shall require any owner of underground facilities who is not otherwise required under sections 319.010 to 319.050 to become a notification center participant.*

## 11. Marking of Sewer Lines

The marking of sewer lines has represented a serious risk to gas utilities. This risk is due to a confluence of factors, but predominantly driven by the lack of marking of sewer lines when gas construction involves trenchless technologies. At a minimum, main sewer lines should be marked by the operator receiving revenue from their use. Laterals feeding customers are also ideally marked by the operator since homeowners generally are unaware of their location and cannot be expected to mark their facility for pending excavation as initiated by an 811 ticket. CGA's best practice 3.26 states:

*Any entity that furnishes or transports products or services to a third party for its use or consumption by means of an underground facility or furnishes or transports products or services for its own internal use by means of an underground facility that occupies or crosses a right-of-way or utility easement is a member of a one call center.*

Gas utilities have invested heavily in addressing the threat posed by unmarked sewer lines. Nevada, Virginia, Colorado and Georgia feature comprehensive language addressing the marking of sewer lines in their dig laws. Other states have language in their dig laws that is less specific and more generic in nature. The following are examples of legislative language that effectively addresses the marking of sewer lines:

Nevada:

*NRS 455.125 Duties of operator of sewer main upon receipt of notification concerning sewer service lateral. If an operator of a sewer main receives notice through an association for operators pursuant to paragraph (a) of subsection 1 of NRS 455.110: 1. For a proposed excavation or demolition, the operator of the sewer main shall provide the person responsible for the excavation or demolition with the operator's best available information regarding the location of the connection of the sewer service lateral to the sewer main. The operator shall convey the information to the person responsible for the excavation or demolition in such manner as is determined by the operator which may include any one or more of the following methods, without limitation: (a) Identification of the location of the connection of the sewer service lateral to the sewer main; (b) Providing copies of documents relating to the location of the sewer service lateral within 2 working days; or (c) Placement of a triangular green marking along the sewer main or the edge of the public right-of way, pointing toward the real property serviced by the sewer service lateral to indicate that the location of the sewer service lateral is unknown. 2. The operator of a sewer main shall make its best efforts to comply with paragraph (a) or (c) of subsection 1 within 2 working days. If an operator of a sewer main cannot complete the requirements of paragraph (a) or (c) of subsection 1 within 2 working days, then the operator and the person responsible for the excavation or demolition must mutually agree upon a reasonable amount of time within which the operator must comply. 3. A government, governmental agency or political subdivision of a government that operates a sewer main: (a) Except as otherwise provided in subsection 4, in a county with a population of 45,000 or 9 more may not charge a person responsible for excavation or demolition in a public right-of way for complying with this section. (b) In a county with a population of less than 45,000 may charge a person responsible for excavation or demolition in a public right-of-way for complying with this section in an amount that does not exceed the actual costs for the operator for compliance with this section. Costs assessed pursuant to this paragraph are not subject to the provisions of NRS 354.59881 to 354.59889, inclusive. 4. A government, governmental agency or political subdivision that operates a sewer main in a county with a population of 45,000 or more may charge a person responsible for excavation or demolition in a public right-of-way for complying with this section in an amount that does not exceed the actual costs for the operator for compliance with this section if: (a) The sewer system of the operator services not more than 260 accounts; and (b) There is no natural gas pipeline located within the service area of the operator of the sewer main. Costs assessed pursuant to this subsection are not subject to the provisions of NRS 354.59881 to 354.59889, inclusive. 5. If the operator of a sewer main has received the information required pursuant to NRS 455.131 or has otherwise identified the location of*

*the sewer service lateral in the public right-of-way, then the operator of the sewer main shall be responsible thereafter to identify the location of the sewer service lateral from that information. NRS 455.127 Duty of operator of sewer main to maintain certain information relating to locations of connections. An operator of a sewer main shall maintain all information relating to the locations of connections of sewer service laterals to the sewer main: 1. Developed by the operator pursuant to NRS 455.125; or 2. Provided to the operator pursuant to subsection 2 of NRS 455.131. NRS 455.129 Operator of sewer main does not assume further duties or responsibilities for compliance with provisions. An operator of a sewer main who is not otherwise required by law to be responsible for the maintenance, operation, ownership or 10 repair of a sewer service lateral that connects to the sewer main does not assume any further duty with respect to a sewer service lateral pursuant to this chapter nor become responsible for the maintenance, operation, ownership or repair of the sewer service lateral that connects to the sewer main solely because the operator complied with the provisions of NRS 455.080 to 455.180, inclusive.*

[Virginia:](#)

### **Private sewer laterals and sewer system laterals**

*A. Notwithstanding any provision of this chapter to the contrary, the protection of sewer system laterals and private sewer laterals shall be implemented as provided in this section. When an excavation is to take place within a public right-of-way or public sewer easement, the sewer system operator shall exercise reasonable care to mark the approximate horizontal location of sewer system laterals within the public right-of-way or public sewer easement as provided in § 56-265.19.*

*B. When (i) an excavation is to take place outside the public right-of-way or public sewer easement, (ii) the excavation involves the installation or maintenance of gas or electric utility lines by trenchless technology, (iii) the potential for a conflict with a sewer lateral exists, and (iv) sewer system laterals are located in the public right-of-way:*

*1. The sewer system operator shall exercise reasonable care to mark the approximate horizontal location of sewer system laterals by:*

*a. Marking the location of the sewer system lateral where it meets the edge of the right-of-way or public sewer easement, if known; or*

*b. If the location described in subdivision B 1 a is unknown, marking the location where the sewer system lateral connects to the sewer system main.*

*2. When the sewer system laterals have been marked in accordance with subdivision B 1 and the excavator reasonably concludes that a private sewer lateral may be impacted by the planned excavation based upon visual evidence, knowledge of the proposed excavation site, or other information available to the excavator, the excavator shall exercise reasonable care to protect the private sewer lateral. For purposes of this subdivision, reasonable care includes the following actions:*

*a. Reviewing information provided by the private sewer lateral owner;*

*b. Meeting with the sewer system operator on-site, if the sewer system operator has additional information to provide about the location of private sewer laterals; or*

*c. Conducting a visual inspection of the proposed excavation site in an effort to determine the probable path of the sewer lateral.*

*C. When (i) an excavation is to take place within or outside the public right-of-way or public sewer easement, (ii) the excavation involves the installation or maintenance of gas or electric utility lines by trenchless technology, (iii) the potential for a conflict with a sewer lateral exists, and (iv) private sewer laterals are located in the public right-of-way or easement:*

*1. The sewer system operator shall assist the excavator by one of the following methods, unless the operator marks private sewer laterals in the manner required for its sewer system laterals under subsection B:*

*a. Provide copies of the best reasonably available records regarding the location of the private sewer laterals by electronic message, mail, facsimile, or other delivery method. If an excavation affects 25 or more private sewer laterals, the sewer system operator's response shall be in accordance with the timelines set forth in § 56-265.17:3. If the provision of records required by this subsection imposes an unreasonable burden or substantial cost upon a sewer system operator, the excavator and the sewer system operator shall endeavor in good faith to reach an agreement to provide the sewer system operator with additional time to provide the records or any other mutually agreeable accommodation.*

*b. Provide the best reasonably available records on the Internet or another readily accessible electronic system in order that the records may be retrieved by the excavator from a remote location. If the sewer system operator has implemented such a system, then the sewer system operator shall have no further obligations to provide records under subdivision C 1 a.*

*c. If the sewer system operator has no such records, but has additional information to provide about the location of private sewer laterals, then the sewer system operator shall notify the excavator of such information and, upon request, either meet with the excavator on-site or convey such information to the excavator.*

*2. When the records have been made available in accordance with subdivision C 1 and the excavator reasonably concludes that a private sewer lateral may be impacted by the planned excavation based upon visual evidence, knowledge of the proposed excavation site, or other information available to the excavator, the excavator shall exercise reasonable care to protect the private sewer lateral. For purposes of this subdivision, reasonable care includes the following actions:*

*a. Reviewing information provided by the sewer system operator;*

*b. Reviewing information provided by the private sewer lateral owner;*

*c. Meeting with the sewer system operator on-site if the sewer system operator has additional information to provide about the location of private sewer laterals; or*



*d. Conducting a visual inspection of the proposed excavation site in an effort to determine the probable path of the sewer lateral.*

*D. Sewer system operators shall mark utility lines, other than sewer system laterals and private sewer laterals, as provided by other sections of this chapter.*

*E. Water system operators shall mark water system utility lines as provided by other sections of this chapter, except that a water system operator shall not be responsible for marking private water laterals.*

*F. Records regarding the location of private sewer laterals provided on the Internet or otherwise made accessible by an electronic system pursuant to subdivision C 1 b shall also be accessible to other public utilities and cable operators or excavators working on their behalf for purposes of compliance with this chapter.*

*G. In all excavations, the excavator shall exercise reasonable care to protect underground utility lines.*

Colorado:

*(II) A sewer system owner or operator shall provide its best available information when marking the location of sewer laterals in the public right-of-way with clearly identifiable markings. "Best available information" includes tap measurements and historic records. If the sewer lateral can be electronically located, the sewer system owner or operator shall mark and document the location of the sewer laterals in accordance with this subsection (4)(a). If a sewer system owner or operator of a sewer lateral cannot electronically locate the sewer lateral, the excavator shall find the sewer lateral. (III) The marking of customer-owned laterals in the public right-of-way is for informational purposes only, and an owner or operator is not liable to any party for damages or injuries resulting from damage done to customer-owned laterals*

Georgia:

*(b) Persons who install water and sewer facilities or who own such facilities until those facilities are accepted by a local governing authority or other entity are not required to participate as members of the UPC and shall not be considered facility owners or operators. All such persons shall install and maintain permanent markers, as defined in Code Section 25-9-3, identifying all water and sewer facilities at the time of the facility installation. Notwithstanding the above, all owners or operators of water and sewer facilities that provide service from such facilities are considered facility owners or operators and shall be members of the UPC.*

**§ 25-9-7. Determining whether utility facilities are present; information to UPC; noncompliance; future utility facilities; abandoned utility facilities**

*.....(b) (1) Within 48 hours beginning the next business day following receipt by the UPC of the locate request filed in accordance with Code Section 25-9-6, excluding hours during days other than business days, each sewer system owner or operator shall*

*determine whether or not sewer laterals are located or likely to be located on the tract or parcel of land upon which the excavating or blasting is to occur. If sewer laterals are determined to be present or likely to be present, then the sewer system owner or operator shall assist in designating sewer laterals up to the edge of the public right of way. Such assistance shall not constitute ownership or operation of the sewer lateral by the sewer system owner or operator. Good faith compliance with provisions of this subsection in response to a locate request shall constitute full compliance with this chapter, and no person shall be found liable to any party for damages or injuries as a result of performing in compliance with the requirements of this subsection.*

*(2) To assist in designating sewer laterals, the sewer system owner or operator shall provide its best available information regarding the location of the sewer laterals to the excavator. This information shall be conveyed to the excavator in a manner that may include, but shall not be limited to, any one of the following methods:*

*(A) Marking the location of sewer laterals in accordance with subsection (a) of this section, provided that:*

*(i) Any sewer lateral designated using the best available information shall constitute a good faith attempt and shall be deemed to be in compliance with this subsection, provided that such mark represents only the best available information of the sewer system owner or operator and may not be accurate; and*

*(ii) If a sewer lateral is unlocatable, a triangular green mark shall be placed at the sewer main pointing at the address in question to indicate the presence of an unlocatable sewer lateral;*

*(B) Providing electronic copies of or delivering the records through facsimile or by other means to an agreed upon location within 48 hours beginning the next business day following receipt by the UPC of the locate request filed in accordance with Code Section 25-9-6, excluding hours during days other than business days; provided, however, that for local governing authorities that receive fewer than 50 locate requests annually, the local governing authority may designate the agreed upon location and communicate such designation to the excavator;*

*(C) Arranging to meet the excavator on site to provide the best available information about the location of the sewer laterals;*

*(D) Providing the records through other processes and to other locations approved by documented agreement between the excavator and the facility owner or operator; or*

*(E) Any other reasonable means of conveyance approved by the commission after receiving recommendations from the advisory committee, provided that such means are equivalent to or exceed the provisions of subparagraph (A), (B), or (C) of this paragraph.*

*(c) Each facility owner or operator, either upon determining that no utility facility or sewer lateral is present on the tract or parcel of land or upon completion of the designation of the location of any utility facilities or sewer laterals on the tract or parcel of land as required by subsection (a) or (b) of this Code section, shall provide this information to the UPC in accordance with procedures developed by the UPC, which may include the*

use of the PRIS. In no event shall such notice be provided later than midnight of the second business day following receipt by the UPC of actual notice filed in accordance with Code Section 25-9-6.

*(d) In the event the facility owner or operator is unable to designate the location of the utility facilities or sewer laterals due to extraordinary circumstances, the facility owner or operator shall notify the UPC and provide an estimated completion date in accordance with procedures developed by the UPC, which may include the use of the PRIS.*

*(e) If, at the end of the time period specified in subsections (a) and (b) of this Code section, any facility owner or operator has not complied with the requirements of subsections (a), (b), and (c) of this Code section, as applicable, the UPC shall issue a second request to each such facility owner or operator. If the facility owner or operator does not respond to this additional request by 12:00 Noon of that business day, either by notifying the UPC in accordance with procedures developed by the UPC that no utility facilities or sewer laterals are present on the tract or parcel of land, or by designating the location of such utility facilities or sewer laterals in accordance with the provisions of subsections (a) and (b) of this Code section, as applicable, then the person providing notice pursuant to Code Section 25-9-6 may proceed with the excavating or blasting, provided that there is no visible and obvious evidence of the presence of an unmarked utility facility or sewer lateral on the tract or parcel of land. Such person shall not be subject to any liability resulting from damage to the utility facility or sewer lateral as a result of the blasting or excavating, provided that such person complies with the requirements of Code Section 25-9-8.*

*(f) If visible and obvious evidence of the presence of an unmarked utility facility or sewer lateral does exist and the facility owner or operator either refuses to comply with subsections (a) through (d) of this Code section, as applicable, or is not a member of the UPC, then the excavator shall attempt to designate such facility or sewer lateral prior to excavating. The facility owner or operator shall be strictly liable for the actual costs associated with the excavator designating such utility facilities and sewer laterals and any associated downtime. Such costs shall not exceed \$100.00 or documented actual costs, whichever is greater, for each locate request.*

*(g) All utility facilities installed by facility owners or operators on or after January 1, 2001, shall be installed in a manner which will make them locatable using a generally accepted electronic locating method. All sewer laterals installed on or after January 1, 2006, shall be installed in a manner which will make them locatable by facility owners or operators using a generally accepted electronic locating method. In the event that an unlocatable utility facility or unlocatable sewer lateral becomes exposed when the facility owner or operator is present or in the case of sewer laterals when the sewer utility owner or operator is present on or after January 1, 2006, such utility facility or sewer lateral shall be made locatable through the use of a permanent marker or an updating of permanent records.*

## 12. Enforcement Entity Within the State

Any effective and comprehensive state legislation seeking to mitigate and minimize excavation damage must include effective enforcement mechanisms. Although there are different

approaches to enforcement, including state utility commissions and state attorney general's offices, one particularly effective approach is when an Advisory Board or Damage Prevention Council holds the authority to exert enforcement over non-compliant parties when damage occurs. These entities are typically comprised of multiple stakeholders where the state's public utility commission is often considered as the leader. Another approach is to have the state's pipeline safety enforcement agency also function as the overall damage prevention authority. There are states who have had low damage rates for gas pipelines, with either enforcement model, but the key is effective, active, meaningful enforcement which would include the ability to enforce penalties upon non-compliant excavators. Sufficient funding and resources must be allocated to damage investigations, enforcement proceedings, and penalty collection. PHMSA conducts annual evaluations for state damage prevention programs, determining which states may be inadequate. PHMSA would then have legal authority enforcing that state's damage prevention law until the state takes actions to receive an "adequate" evaluation.<sup>5</sup>

Below is a breakdown of the entity in each state who holds the responsibility to enforce the dig law:

Utilities Commission:

- [Arizona](#)
- [Connecticut](#)
- [Georgia](#)
- [Hawaii](#)
- [Illinois \(outside of Chicago\)](#)
- [Indiana](#)
- [Kansas](#)
- [Kentucky](#)
- [Maine](#)
- [Massachusetts](#)
- [Michigan](#)
- [Minnesota](#)
- [Nevada](#)
- [New Hampshire](#)
- [New Jersey](#)
- [New Mexico](#)

---

<sup>5</sup> <https://www.phmsa.dot.gov/pipeline/excavator-final-rule/about-excavation-enforcement-final-rule>

- [New York](#)
- [North Dakota](#)
- [Ohio](#)
- [Oklahoma](#)
- [Oregon](#)
- [Pennsylvania](#)
- [Rhode Island](#)
- [Texas](#)
- [Washington](#)
- [Wisconsin](#)

Council:

- [Alabama](#)
- [California](#)
- [Colorado](#)
- [Idaho](#)
- [Maryland](#)
- [Mississippi](#)
- [Montana](#)
- [North Carolina](#)
- [South Dakota](#)
- [Vermont](#)
- [Virginia](#)
- [West Virginia](#)

Attorney General:

- [Arkansas](#)
- [Delaware](#)
- [Iowa](#)
- [Missouri](#)
- [Nebraska](#)
- [South Carolina](#)
- [Tennessee](#)
- [Utah](#)
- [Wyoming](#)

Other:

- [Alaska](#)
- [Florida](#)
- [Illinois \(Chicago only\)](#)
- [Louisiana](#)

It is often difficult to assess what “active enforcement” means. However, below is a list of activities that, collectively, could represent active, effective enforcement for all stakeholders:

- Ability to impose monetary penalties on any entities found to be in violation of state law;
- Ability to impose penalties that are consequential for excavation damages resulting in fatalities or severe damage to the environment;
- A record that demonstrates a balanced approach to issuing penalties and fines;
- Ability to influence behaviors from all stakeholders;
- Ability to shut down an excavator who is digging without a legitimate 811 ticket;
- Ability to revoke professional licenses for excavators;
- Ability to require training for those who are found to excavate without an 811 ticket;
- Transparency in enforcement activities and all matters associated with staffing, funding, and PHMSA review; and
- Staffing that enables timely investigation of damages and imposing enforcement actions

### **Advancing a Bill at the State Legislature**

Strengthening a state’s damage prevention law is a challenging task. It often takes years to achieve incremental improvements. Below are some potential issues that natural gas utilities should consider when seeking to strengthen state dig laws:

Pay attention to special considerations in addressing municipalities in the state damage prevention law

- Address funding considerations, particularly for the entity that oversees the enforcement of the state damage prevention law
- Secure key stakeholder input and buy-in early in the legislative drafting process to prevent last-minute amendments or concerns from powerful special interest groups that could doom the entire bill.
  - I. This is especially crucial for other branches of government. Ensure key policymakers such as Public Utility Commission, the Attorney General’s office, and the governor’s office are on board and address any concerns they may have as early as possible in the process.

- II. Include a representative(s) from small or rural utilities in the stakeholder group to deter legislators from arguing that a bill does not reflect the interests of smaller entities.
  - III. Highlight successful examples from other states and the benefits those changes have yielded.
- Identify a “champion” for the bill who can serve as the primary sponsor. Ideally this is an individual in leadership with political clout, such as the chair of the committee with jurisdiction over the bill. Line up one or two additional “champions” to lead support for the bill and ensure it does not get bogged down by other competing legislation. Consistently communicate with your “Champion” to ensure the bill remains a priority item.
  - Accept that it is usually not possible to get everyone to yes – if possible, at least get critical stakeholders to neutral. Have a predetermined list of items in the bill that you cannot live without and a list you are willing to compromise on.
  - Identify and have a plan for those stakeholders who will not support or go neutral.
  - Identify key dates crucial for passage including any intro deadlines, cross-over dates, and bill signing deadlines.
  - Establish an informal coalition of likeminded supporters of the bill to amplify your message and ensure the bill is a priority issue for that legislative session. The group can also share intel and provide updates on the bill’s prospects for passage.
    - I. Organize supportive stakeholders to attend all scheduled bill hearings and provide supportive testimony.
    - II. Highlight the bill at all events with legislators and other key stakeholders.
  - Work with the bill sponsor to ensure the bill gets on the calendar early (this could mean pre-filing the bill by a certain date). Identify who controls for the bill calendar and educate on the value of updating the state’s damage prevention law.
  - Meet with legislators on the committees of jurisdiction to educate them on the bill’s benefits and try to alleviate any outstanding questions or concerns. Always remain open to feedback from other lawmakers and keep your sponsor in the loop.
  - Be alert for stakeholders popping up at the last minute to derail the bill or introduce unfriendly amendments. Refer back to your list of “must haves” and items that you may be willing to deal on.

In conclusion, below is a list of some of the most critical characteristics of an effective state damage prevention law:

- a) A definition of “excavation” and “excavator” that is broad;
- b) Hand digging or soft excavation requirements within a defined tolerance zone;
- c) A “limited” number of exemptions for excavators and for owner/operators;
- d) Specific language for sewer operator to locate sewer facilities, including laterals;
- e) Newly constructed facilities must be locatable electronically by owner/operator;
- f) White-Lining is defined and promoted;
- g) Positive response is defined and required by owners/operators;
- h) A limit on the size/scope of a dig ticket and an established duration for a dig ticket;
- i) A defined entity to enforce the dig law, who has been given the authority and the budget to issue penalties, including fines to excavators and facility operators;
- j) A process to initiate a complaint against an excavator or owner/operator who is non-compliant with the state law, or a process to collect damage reports that allows the enforcement entity to identify violators;
- k) Maximum fines or penalties are strong enough, particularly for repeat offenders and professional excavators who fail to notify 811 of the intent to dig, or who fail to hand dig in the tolerance zone; and
- l) Requirement of exposing underground facility to verify above and below location when crossing facility while horizontal directional drilling.