ISSUE
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Excavation SAFETY

GUIDE & DIRECTORY™

PIPELINE EDITION

Pipeline Association *for* Public Awareness

2025

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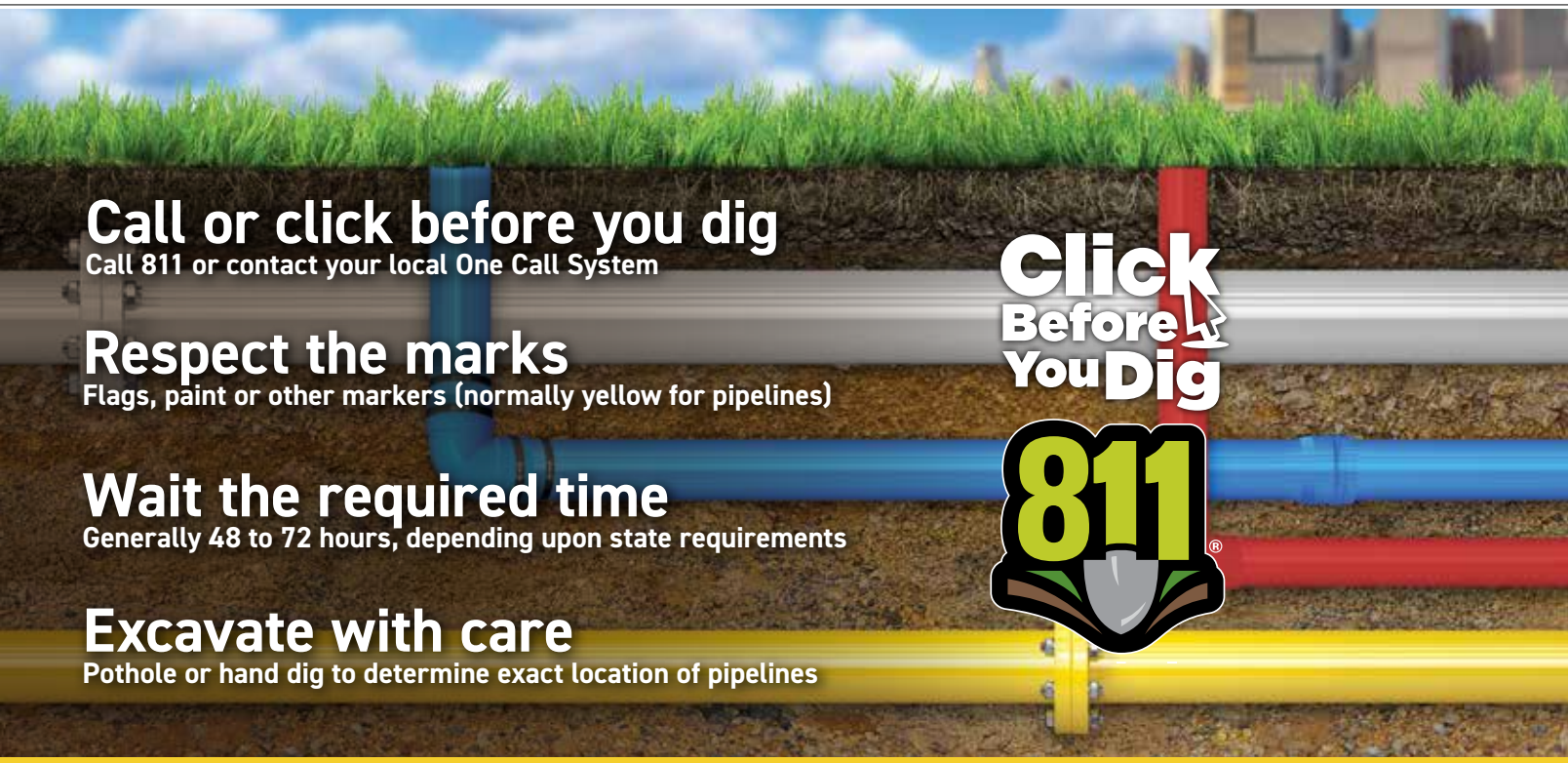

Safe digging isn't just good practice—it's good business.

As an excavation professional, ensuring safe digging practices starts when you call or click 811 before breaking ground. This step is not only required by most state laws, but it's also a free and simple way to protect your team and avoid costly damages or project delays. When you call or click 811, you are connected with your local One Call center and details about your excavation are shared with operators of underground utilities near your site. These operators will promptly mark the location of their facilities according to state regulations, helping you avoid potential hazards, and maintain project timelines. For emergency contact information, always connect directly with the utility operator or consult nearby pipeline markers.

Pipelines are essential to our nation's infrastructure, delivering the gas and liquid products that power homes, businesses, and industries. While pipeline companies conduct routine maintenance to keep their systems reliable, your role in protecting this infrastructure is important as well. By staying alert and reporting any unusual conditions or suspicious activities near pipelines, you contribute to the safety and integrity of the entire energy network. Immediate reporting to local law enforcement or the pipeline operator can prevent incidents and keep your team and community safe. By following these essential safety practices, including the vital step to call or click 811, you help prevent pipeline emergencies, protect your workforce, and ensure your projects run smoothly.

Know the hazards

- Natural gas and other petroleum products will ignite and burn.
- If exposed to the skin, serious irritations may occur.
- Escaping gases can displace oxygen.

Recognize unsafe conditions

- Pipelines that are: leaking, damaged, insufficiently supported, exposed to high heat, or threatened by natural forces are all unsafe conditions.
- Any damaged or weakened pipeline must always be checked by the pipeline company for remaining strength. Even very minor damages can cause future leaks or ruptures and must be investigated.
- Pools of liquid, blowing dirt, hissing sounds, vapor clouds, gaseous odors, bubbles in standing water, dead vegetation and frozen soil or ice next to pipelines are all signs of a pipeline leak and should be treated as an emergency.

Respond immediately

- Immediately leave the area while avoiding any action that may cause sparks. Abandon all equipment and get a safe distance away.
- Call 911 and then immediately notify the pipeline company.
- Keep others away until emergency officials arrive. Stay upwind, do not attempt to operate pipeline valves or extinguish any pipeline fires.

Llame al 811 o contacte su sistema local de One Call

Como profesional de excavación, usted garantiza prácticas de excavación seguras al llamar o hacer clic en 811 antes de comenzar una excavación. Este paso no solo lo exige la mayoría de las leyes estatales, sino que también es una forma gratuita y sencilla de proteger a su equipo y evitar daños costosos y retrasos en sus proyectos. Al llamar o hacer clic en 811, usted se conecta con su centro de One Call local y los detalles de su excavación se compartirán con los operadores de servicios subterráneos cerca de su sitio. Estos operadores marcarán rápidamente la ubicación de sus instalaciones de acuerdo con las regulaciones estatales, lo que ayuda a evitar posibles peligros y a mantener los plazos del proyecto. Para obtener información de contacto en caso de emergencia, conéctese siempre directamente con el operador de servicios públicos o consulte los marcadores de tuberías cercanos. Al seguir estas prácticas de seguridad esenciales, incluido el paso esencial de llamar o hacer clic en 811, usted ayuda a prevenir emergencias en las tuberías, protege a su fuerza laboral y garantiza que sus proyectos se desarrollen sin problemas.

Las tuberías son esenciales para la infraestructura de nuestra nación, ya que suministran los productos de gas y líquidos que alimentan hogares, empresas e industrias. Aunque las compañías de tuberías realizan mantenimiento rutinario para mantener sus sistemas en un estado confiable, usted también tiene un papel importante en la protección de esta infraestructura. Al mantenerse alerta e informar cualquier condición irregular o actividad sospechosa cerca de las tuberías, contribuye a la seguridad e integridad de toda la red energética. El aviso inmediato a las fuerzas de seguridad locales o al operador de la tubería puede prevenir incidentes y mantener seguro a su equipo y también a su comunidad.

Conozca los peligros

- Gas natural y otros productos petróleos pueden encenderse y quemar.
- Si expuesta a la piel, serias irritaciones pueden ocurrir.
- Gases escapados pueden desplazar el oxígeno.

Conozca las condiciones peligrosas

- Condiciones peligrosas son: gasoductos u oleoductos que tienen escapes, están dañados, el soporte es insuficiente, están expuestos a temperatura muy alta, o amenazados por las fuerzas de la naturaleza.
- Cualquier gasoducto u oleoducto dañado o frágil siempre debe ser revisado por la compañía que los dirige para determinar la resistencia restante. Incluso daños menores en los gasoductos u oleoductos tienen que ser investigados porque pueden causar escapes o rupturas en el futuro.
- Indicios de un escape en un gasoducto u oleoducto son: charcos de líquido, tierra soplada, sonido de silbidos, nubes de vapor, olores a gas, burbujas en agua estancada, vegetación completamente seca, y tierra congelada o hielo alrededor de ella. Todos estos indicios deben ser tratados como una emergencia.

Actúe de inmediato

- Aléjese del área inmediatamente y evite cualquier acción que pueda causar chispas. Abandone todo el equipo y manténgase a una distancia segura.
- Llame al número de emergencia 911 y luego de inmediato notifique a la compañía que dirige el gasoducto u oleoducto.
- No deje que otras personas se acerquen hasta que llegue el personal de emergencia. Manténgase contra el viento y no intente manejar las válvulas ni extinguir incendios en el gasoducto u oleoducto.

CONTENTS

2025 EXCAVATION SAFETY GUIDE & DIRECTORY

BEFORE YOU DIG

What you need to know and what you need to do before you dig.

LOCATING & MARKING

The importance of accuracy in locating and marking buried facilities.

DIGGING SAFELY

Technologies and techniques to stay safe and avoid damage.

WHEN THINGS GO WRONG

What to do in the event of underground damage.

RESOURCE DIRECTORY

A collection of invaluable information and access to resources.

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The Excavation Safety Guide is designed to be a reference for readers to use all year long. The articles are concise, to the point and focus on current industry trends and technologies. The resources include the CGA Excavation Best Practices, a complete Notification Center listing along with the state laws and provisions, a pull-out Emergency Response poster plus much more. Protecting the buried infrastructure is becoming more of a challenge every day and this guide will help you navigate through these challenges.

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This manual is an informational and educational guide, but it is not intended to provide you with any definitive information regarding legal issues. You need to follow your specific state laws and OSHA rules. If you have any questions on issues raised in this guide, please consult with legal counsel and/or your state Notification Center.

FREE

Excavation Emergencies Poster

LOOK ON PAGE 27 TO FIND YOUR COMPLIMENTARY PULL-OUT POSTER with complete information on how to recognize and respond to the hazards inherent in utility excavation.

Provided by Pipeline Association for Public Awareness

STRATEGIES FOR PREVENTING UTILITY DAMAGE

BY WAYNE JENSEN, VP – DIRECTOR OF SAFETY, HIGGINBOTHAM

Preventing utility damage can be challenging, especially if you don't have a comprehensive file showing what you are doing. In today's utility damage prevention landscape, capturing and documenting best practices is crucial for all stakeholders. Here's a detailed guide to ensure you have all the necessary documentation to prevent damage and associated claims effectively.

1. Verify Positive Response Documentation

Review each positive response to ensure all facilities are marked or confirmed as no conflict.

Many individuals working in the field lack an understanding of what constitutes a "positive response" and its significance for safe digging. Ensure you not only receive a "paper ticket" but also verify the positive response documentation on-site. Many field teams neglect to check if all facilities are marked or if additional actions are required, leading to potential issues if damage occurs. In some regions, such as Florida, only a few positive response codes confirm facilities are marked. The majority indicate that further action is needed.

2. Photograph Locate Marks

Photograph all locate marks to confirm they match those listed in the positive response.

Photographing locate marks is a simple yet powerful practice that can aid in preventing damage. One major provider of directional drilling services required subcontractors to take photos of locate marks, significantly reducing damage incidents. Use tools to document the placement and distance of locate marks relative to the location of buried facilities. Including a 12-foot range pole or level rod in photos provides a perfect perspective for usable documentation. This practice helps in recreating the scene if marks are destroyed during construction.

3. Pothole for Accuracy

Pothole facilities near work areas to verify the accuracy of the marks and document measurements with photos.

Potholing is crucial for confirming the accuracy of utility marks. Document, with photos, the depth and distance from the locate marks to buried facilities using tools like range poles and rulers. This verification process helps in preventing damage and provides valuable evidence if a claim arises. Share this documentation with utility companies to improve overall locate accuracy.

4. Document Utility Markers

Photograph all utility marker pylons in or near the work site.

Large gas line markers, fiber optic pylons, etc. should be photographed to ensure all lines are properly marked. This documentation helps identify potential issues with unmarked facilities that could lead to traumatic injuries as well as costly damage if not addressed.

5. Report Unmarked Surface Indications

Photograph and report surface indications of unmarked facilities to 811.

Surface indications, such as pedestals or other markers, should be documented and reported if they are not marked. This practice helps in identifying potential oversight by locators and ensures all possible indicators of facilities are addressed before excavation begins.

6. Use Technology for Documentation

Effective communication and documentation practices are essential for damage prevention.

Consider using cloud-based technology platforms that integrate with both desktop and mobile devices. The software allows field crews to document their activities, take and upload photos, and ensure best practices are followed. Senior management can monitor compliance in real-time, providing a comprehensive view of the damage prevention efforts across the organization.

By implementing these steps, you can significantly enhance your ability to prevent damage and defend against claims effectively. Proper documentation reinforces your commitment to best practices in utility damage prevention and supports your defense in case of damage. ESC

Identifying a Proposed Excavation Site: White Lining Versus Requesting an Onsite Meeting

BY MARK LIPKA, SUPERVISOR - EDUCATION, PENNSYLVANIA 811

Clear communication and planning are integral to any excavation. Efficiently and effectively identifying and communicating the location of the proposed excavation site is one segment of the larger excavation process. Two common methods for identifying the worksite location are white lining and requesting an onsite excavation meeting. Both methods aim to enhance project safety and efficiency.

White Lining
White lining is a practice performed by the excavator to physically designate the scope of a proposed excavation site. It involves marking the area in white, using paint, chalk, flags, or other means, to outline where excavation will occur.

Strong relationships enhance communication throughout the project, leading to better outcomes and smoother workflows.

Planning: White lining visually assists stakeholders in understanding the intended boundaries of work, helps prevent confusion, and communicates to facility owners and locators the exact site location. Many states require white lining, and it is a recommended best practice of the Common Ground Alliance.

Safety: White lining can help excavators identify potential hazards in the excavation area. Marking the boundaries lets excavators better assess area utilities, structures, and other factors that may pose potential risks during excavation. It also provides facility owners and locators a roadmap of the proposed excavation site. This allows the facility owners to spend more time locating their facilities and less time deciphering the location of the worksite.

Onsite Excavation Meeting
An onsite excavation meeting involves gathering stakeholders at the excavation site to discuss the project in detail. This meeting typically includes the excavator, facility owners, designer/engineers, and others related to or affected by the project.

Planning and Coordination: An onsite meeting allows for in-depth discussions about the project's scope, logistics, and timeline. Stakeholders can collaboratively identify issues, allocate resources, and develop a coordinated approach to project execution.

Safety: Onsite meetings permit the attendees to identify the proposed excavation site by physically walking the project scope. The onsite meeting also provides an opportunity to discuss any aforementioned hazards posing risk to the excavator and safety concerns specific to the excavation and facilities.

Problem Solving: Stakeholders can identify potential issues that may not be apparent from drawings or plans by being physically present at the site. This hands-on approach enables the ability to address concerns on the spot to facilitate quicker resolutions and any needed adjustments.

Relationships: Onsite meetings foster collaboration and build rapport between stakeholders. Strong relationships enhance communication throughout the project, leading to better outcomes and smoother workflows.

To recap, white lining is typically a quick process to provide a visual boundary of the worksite while onsite meetings enhance the visualization to include detailed planning, problem solving, and coordination among stakeholders. Both white lining and onsite excavation meetings play a critical role in ensuring the success of construction projects. Understanding each method can help excavators choose the right approach for their projects, leading to safer and more efficient excavations. ESG

Excavators' Role in Ensuring Timely Utility Locating and Safe Digging

BY NANCY MITCHELL, VP, GOVERNMENT AFFAIRS, USIC

Increased investment in telecommunication infrastructure has created a critical need for the prioritization of the utility locating process and increased and consistent communication between excavators and locators to ensure safe and efficient fiber network installation.

It is required by law that existing underground utility lines be marked prior to excavation to prevent damage to existing infrastructure, disruption of critical services, and to protect the safety of crews and communities. As contractors are deployed across state lines, it is imperative they know and follow the state-specific dig safe processes and laws, which can be found online at *Call811.com/811-In-Your-State.* Some state One Call centers also have materials providing such guidance available online or by request.

In addition to following the applicable dig safe processes and laws, there are consistent guidelines for submitting locate requests that can help excavators ensure timely and efficient locates including the safety of their crews:

- For large-scope projects, conduct an on-site pre-construction briefing to communicate the scope and timing of the project, which helps utility locators plan for staffing needs.
- For ongoing coordination, provide a contact familiar with the dig site. Check the number and email provided to make sure all contact information is accurate.
- Limit the scope of locate requests to comply with state-specific laws or 811 requirements to help ensure marks are intact when you are ready to dig. This helps prevent the need for remarks.
- Only submit locate requests for work you plan to complete during the lifespan of the ticket. Just-in-case or backup tickets result in unnecessary work for locators, which can delay the marking of time-sensitive excavation sites.
- Include clear, detailed instructions and define the excavation site with GPS coordinates, landmarks, and white lining.
- Do not request that both sides of the road be marked if not necessary. If your request includes a road crossing, provide the exact address of the crossing so locators are not required to mark an entire side of the street when only the crossing is needed.
- Once a ticket has been completed, do not update it. When a tie-in or inspection is required, submit a new locate request for the specific address to prevent unnecessary remarking.
- Avoid submitting multiple locate requests on the same day at the beginning of the week. Stagger your requests throughout the week in alignment with your dig schedule to prevent a buildup of late tickets at the end of the week, which can cause delays of time-sensitive locates.

Do not submit locate requests on days with severe weather conditions, which create safety hazards for locators and can wash away markings. Adding to ticket volume on these days may result in delays. Following these guidelines for submitting locate requests is critical for preventing unnecessary marking and remarking. As

Scan to view Groundwork video in English and Spanish

locators work to meet increased demand driven by long-scope projects, such as fiber overbuilds (which take more than six times longer to mark than a standard ticket), preventing unnecessary work is key to keeping projects moving forward. Closely managing the locate request submission process is a way for contractors to be proactive in preventing late locates and reschedules that can delay their project schedules.

Advance and ongoing communication and coordination between excavators and utility locators is essential to prevent damages and maintain project schedules. The timeframe for recruiting, hiring, and training utility locators to proficiency can be as long as 12 months. **To enable utility locators to plan staffing resources in support of long-scope fiber deployment projects, especially in rural areas with smaller existing staff, it is necessary for telecommunication companies and their contractors to provide deployment forecasts to locators at least 8 to 12 months in advance, and share build plans before the project commences.**

Onsite pre-construction briefings followed by regular coordination meetings, in addition to providing consistently accessible contacts, are key to maximizing efficiency, preventing project delays, damages, and ensuring the safety of excavation crews and communities.

In the rapid evolution of telecommunication infrastructure deployment, excavators have an important role to play in damage prevention. As utility locators invest in staffing, advanced technologies, and service innovations to deliver timely and accurate locates, they are relying on a commitment from the excavation community to:

- Maintain knowledge and compliance with state-specific processes and dig safe laws.
- Closely manage the locate request submission process.
- Share project forecasts and build plans with locators in advance with sufficient time for resource planning.
- Engage in consistent communication and coordination with locators.

Together, we can enhance the nation's telecommunication networks while preventing damage to critical, existing underground infrastructure and protecting the safety of excavation crews and our communities. ESG

Pre-Excavation Checklist

Before EVERY Excavation

Click Before You Dig 811

In the Office

- ○ Review all drawings, plans, engineering blueprints for existing buried facilities
- ○ Proposed excavation area has been marked in white paint and/or flags
- ○ Call 811 at least 2-3 business days before excavation (check your state One Call laws)
- ○ Locate ticket number is posted at the work location
- ○ Onsite meeting scheduled with all high profile facilities in locate area (gas/oil pipelines, high-voltage cables, fiber optic)

Onsite

Complete a pre-excavation walkthrough of the entire jobsite and adjacent areas

Visually Inspect the Jobsite

- ○ Signs or marking posts
  - Pavement markers (stamped nails, pavement decals, A-tags)
  - Surface markers
- ○ Other surface signage for landscaped areas
- ○ Locate marks
- ○ Consult any maps or field sketches of the location
- ○ Identify all services to buildings such as:
  - Gas meters
  - Farm taps
  - Pipeline valves
  - Cable pedestals
  - Electric cables
  - Water valves
  - Telephone closures
- ○ Look for the evidence of trench lines from the previous exavation
- ○ Look for the cleared pipeline ROWs
- ○ Talk with the property owner or general contractor to identify potential private facilities that may not be marked:
  - Lighting
  - Outbuildings
  - Pools/Spas
  - Irrigation
  - Sewer laterals
  - Propane tanks
  - Communications lines

Document the Jobsite

- ○ Compare actual jobsite to One Call ticket
  - One Call ticket covers the scope of the work
  - One Call ticket "Work to Begin" date is valid
  - All utilities have responded
  - All facilities are marked within the excavation area
- ○ Photograph the jobsite
  - Locate marks and flags from 360°
  - Permanent signage and location relative to the dig area:
    - Note location, height, and operator of overhead lines
    - Note all required safety signage
  - Video and/or sketches where pertinent

Get more *FREE* training tools and safety resources

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Before You Dig

- ○ Review safety information with anyone working the job
- ○ Confirm with facility owner vacuum or hydro excavation is scheduled for all pipelines impacted
- ○ Locations for hand digging within the tolerance zone are noted
- ○ Emergency equipment available when hazardous atmospheres are potentially present
- ○ List of all emergency contact numbers for assets in and adjacent to the dig zone is readily available
- ○ The location and route to the nearest hospital is known by onsite supervisors
- ○ When possible before any excavation, do a sweep with a locator to identify any foreign lines that are not marked
- ○ Representatives for all critical facilities are present

Lista de Verificación Para la Excavación

Antes de CADA Excavación

Click Before You Dig 811

En la Oficina

- ○ Revisar todos los dibujos, planos y especificaciones de ingeniería de las instalaciones subterráneas actuales
- ○ El área de excavación propuesta ha sido marcado con pintura blanca y/o banderitas
- ○ Marque al 811 por lo menos 2 o 3 días hábiles antes de la excavación (consulte las leyes de One Call de su estado)
- ○ l número de solicitud está colocado en el sitio de trabajo
- ○ Reunión programada con todas las instalaciones prominentes en el área de la localización (tuberias de gas y aciete, cables de alto voltaje, y fibra óptica)

Sitio de Trabajo

Realice una inspección exhaustiva antes de la excavación en S todo el sitio de trabajo y las zonas vecinas

Inspección visual del Sitio de Trabajo

- ○ Letreros o postes de señalización
  - Marcadores de pavimento (clavos estampados, calcomanías de pavimento, etiquetas A)
  - Marcadores superficiales
- ○ Señalizaciones de superficie para áreas ajardinadas
- ○ Marcas de localización
- ○ Consultar mapas o dibujos del sitio
- ○ Identificar todos los servicios a edificios como:
  - Medidores de gas
  - Válvulas agrícolas
  - Válvulas de tubería
  - Soportes para cables
  - Cables eléctricos
  - Válvulas de agua
  - Conexiones telefònicas
- ○ Busque rastros de las líneas de trinchera de la excavación previa
- ○ Revise que las filas de paso de la tubería están despejadas
- ○ Hable con el propietario o el contratista general para identificar posibles instalaciones privadas que no estan marcadas
  - Luces
  - Otros Edificios
  - Piscinas/Spas
  - Sistemas de riego
  - Laterales de alcantarillado
  - Tanques de propano
  - Líneas de comunicación

Documentación del Sitio de Trabajo

- ○ Comparar el sitio de trabajo con el ticket de One Call
  - El alcance del trabajo se refleja en el ticket de One Call
  - La fecha de inicio anotada es válida
  - Todas las compañías de servicios públicos han contestado
  - Todas las instalaciones se encuentran señalizadas dentro del área de excavación
- ○ Fotografía del sitio de trabajo
  - Localización de marcas y banderas en 360°
  - Señalización permanente y su ubicación relativa a la excavación:
    - Anotar la ubicación, altura y operador de las líneas aéreas
    - Anotar toda la señalización de seguridad necesaria
  - Videos y/o bocetos cuando sea pertinente

Obtenga más capacitación y recursos de seguridad *GRATIS*

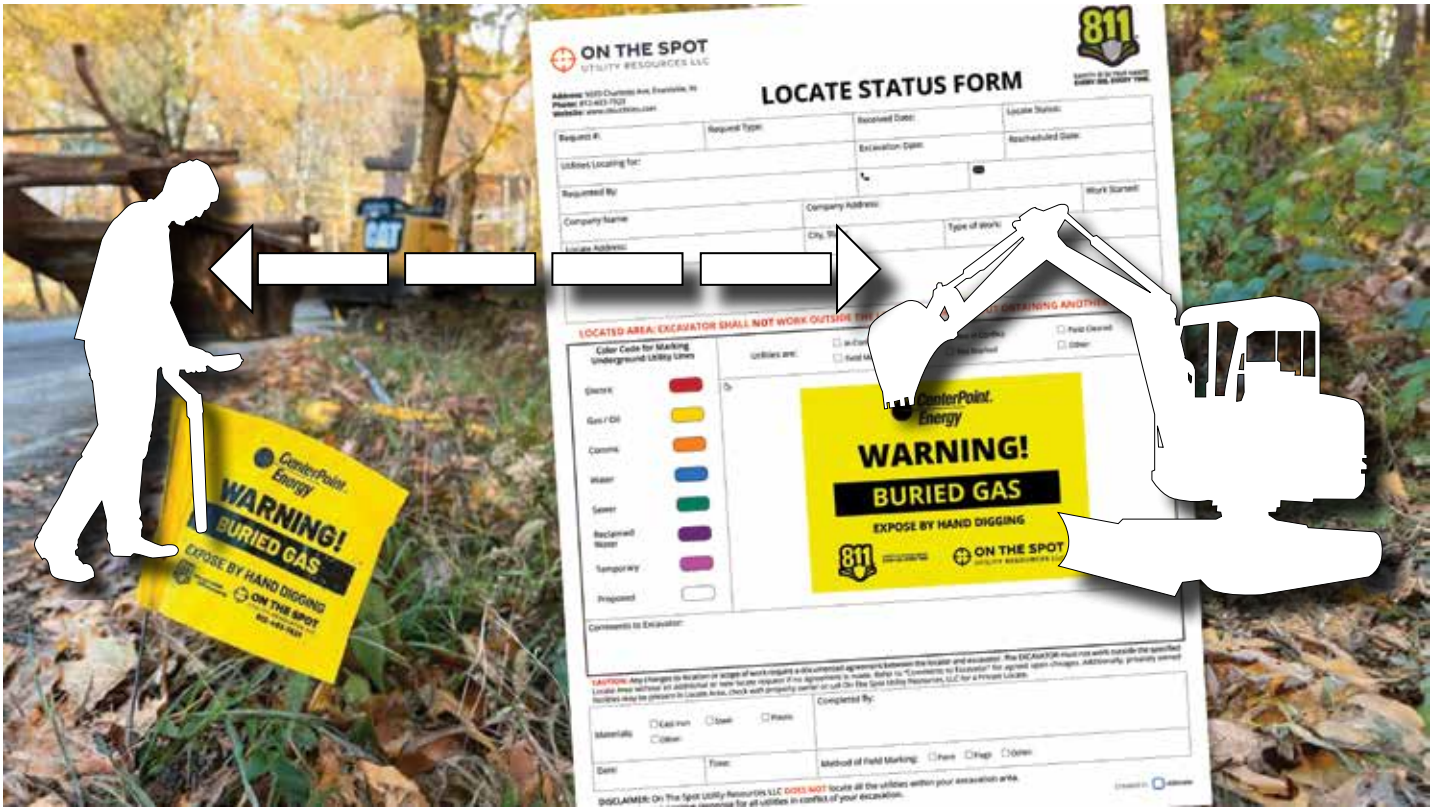
ESCANEAR

Antes de Excavar

- ○ Revise la información de seguridad con todos los empleados
- ○ Confirmar con el propietario que excavación hidráulica o al vacío para todas las tuberías afectadas ha sido programado
- ○ Anotar ubicaciones para la excavación manual dentro de la zona de tolerancia
- ○ Equipo de emergencia esta disponible cuando hay posibilidad de atmósferas peligrosas
- ○ La lista de todos los números de contacto de emergencia para los bienes dentro de la zona de excavación y sus zonas vecinas está disponible
- ○ Los supervisores locales conocen la ubicación del hospital más cercano y como llegar
- ○ Cuando sea posible, haga una inspección con equipo de localización para identificar líneas que no están
- ○ Representantes de las instalaciones esenciales están presentes

The Critical Role of Communication in Utility Locating

BY SHANE HART, SENIOR DAMAGE PREVENTION SPECIALIST, URBINT



Communication isn't just a nicety in the damage prevention industry - it's the first line of defense against accidents, legal repercussions, and costly damages. Recently, Iowa Attorney General Bird announced lawsuits against contractors for illegal excavations that caused significant damage to underground utilities. These cases highlight the real-world consequences of poor planning and a lack of clear communication between contractors and locators.

Whether it's ensuring safety, meeting legal requirements, or maintaining trust, strong communication is essential to prevent these avoidable incidents. By embracing technology, enhancing deliverables, and prioritizing dialogue, we can strengthen the connection between locators and contractors, transforming outcomes for all stakeholders.

High-Stakes Miscommunication

Every year, thousands of utility strikes stem from communication failures, with the 2023 DIRT Report highlighting two critical contributors: marks that faded, were lost, or were not maintained, accounting for 3,168 incidents, and marks that were inaccurately placed due to locator error, leading to 9,869 incidents. These figures underscore the devastating impact of incomplete or unclear information. Such gaps in communication can lead to:

- **Safety hazards:** When marks fade or are misplaced, contractors may strike utilities, causing injuries, fires, or environmental damage.
- **Project inefficiencies:** Misplaced or missing marks result in delays as crews must pause operations to verify utility locations or address unexpected damages.
- **Strained relationships:** Communication breakdowns erode trust between contractors, locators, and utility owners, leading to disputes and dissatisfaction.

These examples show why consistent communication, accurate markings, and proactive maintenance of locate information are non-negotiable in preventing damages. By closing these communication gaps, the industry can avoid thousands of utility strikes each year, protecting lives, infrastructure, and project timelines.

Bridging the Gap: New Tools and Strategies

To address these challenges, we need a fresh approach. Here's how modern practices can build stronger connections between locators and contractors:

1. Automate with a Ticket Management System (TMS)

A Ticket Management System equipped with GIS and markup capabilities allows

locators to share detailed maps with contractors. These tools:

- Provide real-time access to utility data.
- Enable contractors to view and annotate maps directly.
- Automate alerts, updates, and deliverables, reducing human error.
- By working from the same data and visual tools, teams can avoid misinterpretations and save time.

2. Leverage Consistent Communication
Communication isn't a one-off task; it's a continuous process. Using every available channel - texts, calls, emails, alerts, deliverables, and in-person conversations ensures redundancy and clarity.

On The Spot Utility Resources saw a significant shift in behavior when we started including improved deliverables with stickers that matched their signs and local 811 laws. Contractors became more diligent about waiting for clearances before digging, fostering better relationships and safer practices.

3. Share Maps and Visual Data
Equipping contractors with maps they can view and markup directly encourages collaboration and reduces ambiguity. Detailed GIS data ensures everyone is working with precise information about the location and type of utilities. If you're an excavator it's worth viewing digital maps and collecting data where you can. Whether that's marking up an as-built or collecting GPR data.

4. Standardize and Educate
Consistent use of symbols, terminology, and protocols minimizes misunderstandings, creating a universal language that both locators and contractors can rely on. For example, using standardized utility markings and clear legends on maps ensures everyone interprets the information in the same way. Imagine a project where the utility owner and contractor regularly review color-coded markings for gas lines, water mains, and electrical conduits. Without standardized symbols and training, a contractor might mistake a gas line marking for a telecommunication cable, leading to disastrous consequences.

5. Commit to Pre-Project Planning
Face-to-face discussions at the outset of

a project set the stage for success. These meetings allow locators to explain their markings, contractors to outline their plans, and all parties to address uncertainties proactively. Chicago's remarkable success in cutting underground utility damages by half since 2017 underscores the value of collaboration and preparation. Through its robust prevention program, 811 Chicago integrates pre-project design reviews and detailed facility maps to ensure new utility projects avoid existing infrastructure.

The Office of Underground Coordination (OUC) plays a pivotal role in this effort by requiring utility owners to review and approve project designs using tools to visualize facility locations and project data. These preemptive strategies, combined with open dialogue and shared mapping capabilities, create a clear blueprint for avoiding conflicts. Adopting similar approaches in pre-project meetings can help contractors and locators work together seamlessly, improving safety and reducing damage risks.

Communication - A Safeguard
Communication isn't just a tool; it's a safeguard. By adopting advanced systems like TMS, sharing maps with markup capabilities, and emphasizing consistent communication through every possible channel, we can:

- Protect lives and infrastructure
- Improve efficiency and project timelines
- Strengthen trust and collaboration between locators and contractors

The stakes are too high to leave communication to chance. Let's use every method, tool, and conversation to build safer projects and stronger relationships. ESC

LOCATE REQUESTS: COVERING THE BASICS

*Originally published in the 2019 Excavation Safety Guide

Excavation Site Accuracy

Clearly defining the excavation site is critical when requesting a locate. The precision of this information improves the locator's ability to provide accurate marks in the appropriate space. Describing the dig site eliminates confusion. Driving directions and GPS coordinates can save time for the locator - especially in rural, newly-developed or difficult-to-find areas. Pre-marking the area with white paint or flags ensures an onsite visual for areas that are difficult to describe on the ticket.

Non-Members/ Private Utilities

Even if you call your Notification Center for every ground disturbance you undertake, you may still have unmarked facilities in your dig site. Laws vary between states and even municipalities on who is required to be a Notification Center member; and the ownership of many utilities transfer to the property owner at a specific demarcation point. For these facilities, a private utility locator is necessary to indicate their location. A few visual signs of private utilities on a dig site include utility meters, signs, markers, pedestals, hydrants, valve boxes, farm taps, regulators, lighting, or irrigation taps; especially if there is no paint or flags leading to them.

Locate Longevity

Each state has different laws governing when the ticket request should be submitted, how long the locate ticket is valid, how soon the work must begin, and what to do if the marks become illegible. It is important to know the law for the state you are working in. Review the Notification Center Directory beginning on page 51 for the law in your state.

Second Requests: Remark/Refresh Requests, Incomplete Marks, No-Shows

Requests for locates to remark the same location may be required for a variety of reasons. Normally these requests occur because the ticket expired before the project was completed, the initial marks were illegible or incomplete, one or more facility owners did not complete their marking within the required time or the marks were made but need to be refreshed due to activity at the dig site.

Emergency Locates

The exact definition of an emergency locate may vary, but this type of ticket is typically only allowed if there is a situation constituting an imminent danger to life, health, property, or a utility service outage, which requires immediate repair or action. It is a good idea to have a clear understanding of what qualifies in your state as an emergency locate before an emergency occurs.

Onsite or Joint Meeting Requests

An onsite meeting is scheduled when the scope of the work may be confusing or extends over a large geographic area. It is also useful when maps, plans, and schedules need to be shared. This type of meeting also allows excavators to discuss the project and any special circumstances with all concerned parties.

Held at the excavation site, or as close as practical, these meetings normally require more advance notice than a standard locate request. For jobs covering a large area, it is normally best to segment your request into reasonable sections. Identifying these sections on a map will facilitate communication between you and the locators, facility owners, and Notification Center. Notification Centers often need very specific information about your excavation site to request joint meets, so be prepared before you ca11 or click.

Design Notifications

Design notifications are done as a part of the development and preconstruction planning process to accommodate existing utilities and reduce problems during construction. Each state and/or facility owner will likely have specific polices on how these notifications are handled.

Tolerance Zone

The tolerance zone is a defined horizontal distance extending from either side of the outer edge of a buried utility. The exact distance of this tolerance zone varies from state to state, ranging from 18 inches to 24 inches on either side of the line or pipe, and is defined within the state's One Call law. To determine the tolerance zone for a given facility, you must know the state's law and the size of the utility. For example, in a state where the defined tolerance zone is 18 inches, the total size of the tolerance zone would be 38 inches for a two-inch pipe: 18 inches on either side of the pipe plus the two-inch diameter of the pipe itself.

CGA Best Practices call for the size of the pipe to be included in the locate marks on the ground, but caution should always be used when excavating within the tolerance zone as these indicators may be missing or incorrect.

Since locating equipment detects the electromagnetic field surrounding a pipe, and not the pipe itself, the science of locating underground facilities is not exact. The tolerance zone, therefore, serves as a warning to an excavator to proceed with care and caution while working in the area. Hand (or sometimes soft) digging is required within the tolerance zone. ESG

COLOR CODE IDENTIFIERS

WHITE	Proposed Excavation
PINK	Temporary Survey Markings
RED	Electric Power Lines, Cables, Conduit, and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum, or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables, or Conduit
BLUE	Potable Water
PURPLE	Reclaimed Water, Irrigation, and Slurry Lines
GREEN	Sewers and Drain Lines

FACILITY IDENTIFIER			
CH	Chemical	E	Electric
FO	Fiber Optic	G	Gas
LPG	Liquefied Petroleum Gas	PP	Petroleum Products
RR	Railroad Signal	S	Sewer
SD	Storm Drain	SL	Street Lightning
STM	Steam	SP	Slurry System
SS	Storm Sewer	TEL	Telephone
TS	Traffic Signal	TV	Television
W	Reclaimed Water "Purple"	W	Water
UNDERGROUND CONSTRUCTION DESCRIPTIONS			
C	Conduit	CDR	Corridor
D	Distribution Facility	DB	Direct Buried
DE	Dead End	JT	Joint Trench
HP	High Pressure	HH	Hand Hole
MH	Manhole	PB	Pull Box
R	Radius	STR	Structure (vaults, junction boxes, inlets, lift stations)
T	Transmission Facility		
INFRASTRUCTURE MATERIAL			
ABS	Acrylonitrile - Butadiene - Styrene	ACP	Asbestos Cement Pipe
CI	Cast Iron	CMC	Cement Mortar Coated
CML	Cement Mortar Lined	CPP	Corrugated Plastic Pipe
CMP	Corrugated Metal Pipe	CU	Copper
CWD	Cresote Wood Duct	HDPE	High Density Polyethylene
MTD	Multiple Tile Duct	PLA	Plastic (conduit or pipe)
RCB	Reinforced Concrete Box	RCP	Reinforced Concrete Pipe
RF	Reinforced Fiberglass	SCCP	Steel Cylinder Concrete Pipe
STL	Steel	VCP	Vertrified Clay Pipe

Understanding the Marks: Locating and Marking Practices

Chapters from CGA Best Practices 21.0.
For the complete Understanding the Marks: Locating and Marking Best Practices, See CGA Best Practices 21.0 at
BestPractices.CommonGroundAlliance.com

Pipeline Location Information

PIPELINE MARKERS

Pipelines are buried in areas called rights-of-way. Pipeline markers are used to designate the general route of the pipeline. Markers can also be found where a pipeline crosses a street or railroad, emerges from the ground, or in waterways.

BE AWARE: Pipeline markers will not designate the exact location, depth or number of pipelines in the area. Markers come in different shapes and sizes, but will always:

- **Include the word WARNING, DANGER OR CAUTION**
- **Identify the material being transported**
- **Provide a number to reach the company in event of an emergency**
- **Provide the name of the pipeline company**

Gathering pipelines are normally located in rural areas and transport crude oil or natural gas from wellheads and production facilities to processing facilities where the oil, gas and water are separated and processed.

Transmission pipelines move refined liquid products and natural gas from refineries to marketing and distribution terminals typically using larger diameter, high-pressure lines. The general location of all transmission pipelines can be viewed in the National Pipeline Mapping System at www.npms.phmsa.dot.gov

Distribution pipelines are normally located in populated areas and carry natural gas or propane from a transmission pipeline or storage facility directly to residential and industrial customers. Some companies have included the location of their pipelines in a mobile friendly web application called Pipelines Nearby, which can be accessed at www.pipelinesnearby.org

MARCADORES DE TUBERÍA

Las tuberías son enterradas en áreas llamadas derecho de paso (ROW por sus siglas en ingles). Los marcadores de tubería se usan para designar la ruta general de la tubería. Los marcadores también pueden ser encontrados donde una tubería cruza una calle o riel de tren, donde sale del suelo, o en vías navegables.

ESTÉ CONSCIENTE: Los marcadores no dan la ubicación exacta, profundidad ni número de tuberías en el área. Los marcadores vienen en diferentes formas y tamaños, pero siempre incluyen:

- **Incluye la palabra WARNING, DANGER OR CAUTION (aviso, peligro o precaución)**
- **Identifica el material siendo transportado**
- **Da el número de la compañía en case de emergencia**
- **Da el nombre de la compañía de tubería**

Tuberías **Recolectoras** están situadas en zonas rurales y transportan normalmente petróleo crudo o el gas natural de manantiales y de instalaciones de producción a centros de procesamiento donde se separan y se procesan aceite, gas y agua.

Las tuberías de **Transmisión** mueven productos y gas natural líquidos refinados desde refinerías a terminales comerciales y de distribución típicamente usando líneas de alta presión con diámetro más grande. La ubicación general de todas las tuberías de transmisión se puede ver en el sistema de trazado nacional de tubería en www.npms.phmsa.dot.gov

Las tuberías de **Distribución** están situadas en áreas pobladas y llevan normalmente el gas natural o propano de una tubería de transmisión o instalación de almacenamiento directamente a clientes residenciales e industriales. Algunas compañías han incluido la ubicación de sus tuberías en una aplicación web móvil llamada Pipelines Nearby, que puede ser accedida en www.pipelinesnearby.org

Potholing to the Depth You'll Be Digging

BY ASHLEY FUGATE, V.P. OF BUSINESS DEVELOPMENT/DAMAGE PREVENTION, PIPE VIEW AMERICA

Potholing, a practice that is not new to the industry but not always in proper use, is an important part of installing underground assets. Before the commencement of excavation for the construction of underground infrastructure development, the existing infrastructure must be located and exposed for a visual. This is why potholing is commonly called daylighting. Potholing is one of the primary investigative construction techniques used to expose the horizontal and vertical location of utility lines. Potholing should be a crucial part of project planning. Regardless of the term you use, utility location is a crucial step that is necessary to ensure there is no potential or resulting conflict during construction. This also helps ensure the safety of the public and employees is top priority in each project.

Starting the Potholing Process:

Finding What is Below, Going Beyond the One Call Ticket

At the start of any project, always contact 811 through your state 811 website or by calling 8-1-1. Finding out what's below takes some investigation and resources that may add on to your initial One Call ticket submission. Not every utility is in the One Call system in most states.

- Most municipalities do not participate in 811. You must call and work with the local municipality to access maps and ask for their assistance in locating their assets.
- Water and sewer mains are what most municipalities will mark and have mapped access to. This means all lateral lines or service lines will have to be marked privately.
  - There are companies that can come out and run sewers with closed-circuit television (CCTV) cameras to give you access to depths, footage, and give you an X marks the spot locate for your sewer mains and laterals/service lines. This is an added cost that will reduce your potholing time by over 75%, reducing the cost of labor drastically.
- Any type of sprinkler system or any private system a homeowner or business has installed is typically not included in the One Call ticket. This is a simple door knock to inform the homeowner or business there will be digging around the property and allows for a quick question about utilities that may have been installed privately that excavators need to be aware of. This is a fantastic way to build a great rapport with the homeowner or business as well as prevent damages.

Pothole/Daylight Exposure

- After investigating all underground facilities, including private facilities, exposure is key to potholing. Regardless of depth, it must be a requirement to expose all utilities, all the way around the lines. Often while potholing and once the asset is visible, it is viewed as a daylighted utility, and there are possibilities of striking that asset due to the asset not being fully visible.
- Utilizing tools beyond hand digging is a major factor in potholing. When considering a potholing plan, having a good understanding of what type of assets are housed underground as well as depths can help identify what tools you will use in your potholing plans.
- Know the options, tools, and what will work best in the project environment. Hand digging, Hydro-Excavation, Air Excavation, Vacuum Excavation, and outsourcing the potholing process are a few examples of different options and tools that can be used in this process. Being educated in all these options will drastically help improve the process of knowing what needs to be used on each project.
- Knowing the tolerance zone in the state the project is occurring is key. A lot of contractors move from state-to-state working in new areas. Know before you go, set a standard in each potholing plan to educate all employees on the tolerance zone in the state where work is taking place.
- At times, assets will be housed underground at depths greater than five feet. This will require a shoring/sloping/benching plan and process to visualize those assets while also being safe.

Always start with a strategic plan, investigate thoroughly, educate accordingly, and execute effectively and efficiently. ESG

What to Do if You Experience a Late Locate

BY TREY CRAWFORD, VICE PRESIDENT, GRADY CRAWFORD CONSTRUCTION

How should a utility contractor react when they get to a jobsite that has not been located by all parties?

Before a crew goes to a new jobsite, they should check positive response to see if all companies have located, and double check the locate was called in to match the prints or drawings the crew will be using.

If we get a dig ticket and something is not located, the first thing we do is call in a second request to the particular utility through the state One Call center to have it documented that the locates are not complete or missing.

The second thing we do is call the locator directly on their cell phone or send them a text message. We generally like to notify the regional notification center first, so it's documented before we reach out to the locator. We feel

Call the locator directly after notifying the regional notification center first, so it's documented.

this is important in case we have to make a third or fourth request. Most of the time all it requires is the second request.

- Call the locator and let them know you are not seeing all the utilities shown on the dig ticket.
- Let the locator know the area of the job you are concerned about.
- Explain to the locator that you see signs of the utility without any paint or flags on the ground.
- Look for communication or power hand holes, fire hydrants or valves, pressure release valves, or pipeline markers. Also look for any above ground or ground level signs of a utility that might not have been located.

Generally, we have a good relationship with the field locators and they come out when we call.

We make sure we are only calling in tickets that can be worked. Around 10 years ago we were not following best practices and had too many locate tickets called in. Once we sat down at the table with all parties, we found that as long as we called in what we could work, the locators really started focusing on just doing what we had requested, and it cut down on a lot of the second requests we were making.

Communication is the most vital part of getting locates called in, in a timely manner, and having locators locate by the mark-by time. Locators need to feel like contractors are not abusing the system. If you are a contractor and you constantly have locates that are not getting done on a consistent basis, odds are your people in the field do not have a good working relationship with your locator community.

You also have to look internally at your own crews. If one supervisor/foreman has fewer second requests, you have to ask why? I would bet they communicate better with the locators. It costs contractors money sitting around waiting on locates. The most efficient crews work with the locators and if something is not located, they don't waste time sitting around waiting on the locator to show up. They clean out their trucks and equipment, grease the excavators or boring equipment and other productive tasks while waiting on a locator. Generally, the locators tell the supervisor/foreman how long it will take to be onsite.

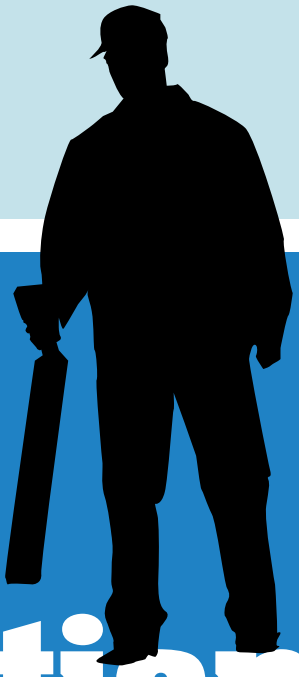
Anything a contractor can do to help the locator benefits the contractor in the long run. It's a partnership that can't be filled with lies and half-truths. Any successful partnership has true expectations and communication along with a little give and take. If you strive to improve on your current status of late locates and show the locating community you are trying to work with them and give them as much notice as possible, it will get better.

The process works but everyone has to do their part and put their best foot forward to try and make noticeable differences in your current plan. Locators will notice and try their best to get the ticket located.

Here's a simple example of how communicating can be beneficial:

A locator calls an excavator or vice versa the morning a ticket is valid, and the locator tells the excavator he/she won't be there until 10:00 AM. The communication means an excavator crew or bore crew can go pick up materials or start hydro excavating other utilities and still be doing something productive while waiting for the locator to show up.

The system works, there are human delays and errors, but the system works. When all parties are communicating and contacting each other it can work well. Sometimes, you just have to do a little extra and it pays off in the end. ESC



Communication is the most vital part of getting locates called in, in a timely manner, and having locators locate by the mark-by time.

communication

Abandoned Lines and Identifying the Owner(s)

BY ROY SACHLEBEN, SAFETY MANAGER, STAR CONSTRUCTION, LLC

"WHAT'S THAT?"

It's a phrase no excavator wants to hear from his/her spotter. My crew was digging in a rear easement in Old Louisville. The area was a mess of buried utilities in a cobblestone alleyway, but everything was on the west side of the alley. We were two feet into the soil on the east side of the alley which was clear of all locate marks, and yet our spotter was calling a halt and wondering, "What is that?"

The shovel had uncovered a metal pipe two inches in diameter. Luckily, it was running at an angle to our trench, otherwise the bucket teeth would have caught it and ripped it from the ground. Only the disturbed soil falling revealed the pipe before it would have been damaged.

At this point, what should be done?

- **First: STOP WORKING!** When an unknown utility is uncovered, stop digging immediately. Never compound the problem by rushing through it.
- **Next: eliminate the obvious by asking some simple questions:**
  - o **What does the 811 ticket say?** Everyone is required to notify their local 811 operator and provide all the information for their excavation. Unfortunately, this does not guarantee an error-free dig since any number of errors can be made.
  - o **The location could be incorrect.** A mistake as small as one digit on an address can mean your utility paint is off by a few feet or several city blocks.
  - o **Your start date could be wrong.** A crew could be digging before locators arrive, or, just as dangerous, the crew could be too late and working on an expired ticket and faded marks.

A positive response from a utility owner is not proof against mistakes. One of my crews hit a gas main because I failed to see that a positive response simply said the locator couldn't find the location. A mistake had been made and that's the point. Since any number of things could have gone wrong, a crew should check their 811 ticket first.

Read the ticket carefully. Was anything missed?

With the 811 information in hand, we need to see if we missed anything in the field.

- Did we miss a mark or not see an indicator of a utility, like a meter box or fresh dig marks? Re-examine the area paying close attention to the known marks. Make certain a mistake had not been made. In our case, the crew had done their job correctly. Gas, phone, electric, cable TV, water, and sewer all responded and marked their respective utilities. All were accounted for and visualized. We missed nothing and were stumped.

Speak to the property owner.
If you are lucky enough to have access to the property owner, talk to them. Homeowners, building managers, or custodial services can all be valuable sources of information. They may be able to fill you in on a known dead service or a private utility that you were uninformed about. In our case, none of the homeowners in the immediate area could help. They were unaware of anything in that area, and it was certainly not a private utility.

Wire can be electric, telecommunications, or even a dog fence. Plastic or medal conduit can carry water, sewage, gas, any manner of wire or fiber, or even dangerous volatile chemicals. Concrete is often used for water or sewage. If this is an OLD utility, you may even see terracotta or wood. What is visible in the field can provide clues, especially if the uncovered utility resembles a known object.

Questions have been asked, the investigation is ongoing, there's a lot of information, but we still have no answer. What's next?

Get help from management.
For our company, the field crew is required to alert their supervisor. For a small, agile company, management may be the person running the excavator. Larger

First: STOP WORKING!

ELIMINATE THE OBVIOUS!

organizations may run through supervisors, inspectors, managers, or higher. Whoever that individual is will need all the information their crew has amassed. They are going to need everything they can get for the next step.

Start making phone calls.
First, notify 811 of a possible damage to an unmarked utility. They may be able to help. However, there is still enough information to go further by making some educated guesses. By making a good guess as to what utility COULD be, you can contact possible owners.

In the field, we found a two inch diameter metal conduit that looked old, was too shallow to be water, and was similar to the gas lines already daylighted. We called the local gas company and reported possible damage to an unlocated gas line. A good gas company will rapidly respond. The local water company was also contacted. Both companies sent investigators.

What if the utility owner is unknown?
We've done some investigating, made some assumptions, and placed a few calls. If we are lucky, this is the end of it. The owner is found, the utility is properly marked, and excavation continues. Every state except Alaska and Kentucky requires utility owners to register with 811. Regardless, mistakes are still made, abandoned utilities are not mapped, and sometimes newer utilities haven't made it into the database yet.

What is a crew to do when the owner of a utility remains hidden?
The crew we have been following had a decisive ending. Our unknown utility was an abandoned gas line identified by old, out-dated maps. A local gas company representative and their crew arrived at the job site. The uncovered line was still under pressure and dangerous, so the gas company decided to tap the line, release the pressure, cap the ends, and get it out of our way. When tapped, a jet of natural gas infused water sprayed out. We were told this was highly dangerous, and it would have happened had we cut the line. Any crew member could have been doused with the flammable concoction. We had been lucky, and when faced with a problem, did everything correctly.

But again I ask…What if no utility owner had been found?
If you followed along with our story, and copied what we did, you're already halfway to your own happily ever after by calling your local 811 office and reporting the issue. This is your best option for finding that phantom owner (as a number of 811 representatives have informed me).

One last time I ask..What IF?
As a last resort, you have two options. The first is speaking with your customer to see if there is another available route. Perhaps there is a better option that avoids the unknown utility. The second option is extremely careful hand digging if allowed by local authorities and state law. If this was a known utility in your way, you would be permitted to carefully excavate without mechanical means. Don't forget to support the utility along the trench to prevent damage from a sagging line, and remember, this is a last resort and only if permitted by local laws and regulations. ESG

START MAKING PHONE CALLS

WHAT IF?

Excavator Q&A

BY ROGER COX, PRESIDENT, ACTS NOW, INC

Let me introduce the group. James Keith (JK) with TL Wallace, headquartered in Columbia, MS has worked in the industry for 25 years. While James works within the gas industry, the company also installs other underground utilities, including water and sewer.

Jason A. Porter, CSP (JP) works with Apex Pipeline Services, Inc, headquartered in Nitro, WV. He has worked for Apex for more than 12 years, and prior to that worked in the oil and gas industry as a Risk Management Consultant. Jason primarily works in the natural gas industry.

Mike Lang (ML) worked with Miller Pipeline, headquartered in Indianapolis, IN for the past 19 years. Gas, water, and drainage are all part of Miller Pipeline's expertise.

1. How do you ensure your crews are trained in damage prevention practices?

(JK) New hires go through safer hub training, OQ testing, and eventually all employees go through a competent person training course in excavation. We also have four safety meetings each year where damage prevention is on the agenda.

(JP) All employees go through orientation training when brought on to a new project. Part of that training focuses on damage prevention measures and policies to prevent line strikes or unintended damages. Employees also participate in a daily Job Safety Analysis (JSA) session with their specific work crews. Part of that JSA discussion covers any excavation activities and any associated foreign line crossings that were identified by the One Call process or by review of the project provided alignment sheets.

(ML) The company trains on Best Practices for safe excavation and Horizontal Directional Drilling (HDD), and reinforces the training with onsite daily huddles, monthly safety meetings, and in-house job site safety inspections. Keeping up to date with the various 811 dig laws is an important component of safe digging and what we do.

2. What measures do you implement to identify and protect underground utilities before starting any excavation work?

(JK) We call 811 for a required dig ticket. The foreman on each crew must fill out a pre-excavation and/or boring permit before excavation begins on a project. These permits are designed as a checklist for all the precautionary steps required before the excavation begins. We also pre-camera the excavation site before excavating.

(JP) Review of all alignment sheets and One Call tickets prior to excavation work starting with all Foreman. A foreign line list is developed from the alignment sheets and shared with all crews. The list will identify the line as well as Station #/location of the line.

What is your top three list for a safe and successful project?

Prior to the start of any excavation work, a line sweep is conducted on the entire right-of-way to attempt to identify any potential foreign lines. Once any foreign line is identified, potholing activities are conducted to confirm depth and location. Potholing is performed by a method of manual digging.

(ML) Every project starts with a project walk-through and understanding the expectations of the owner/operator. When locates are called in and completed, all utilities are hand spotted or vacuum excavated to affirm and identify. We not only look for marked utilities but try to identify any unmarked utilities that may exist. If it is determined that conflicts may exist, discussions with the operator are held to determine if a reroute is a better option.

3. How do you stay updated on the latest damage prevention technologies and best practices?

(JK) Members of my team and I attend local 811 damage prevention meetings and the annual 811 Conference every year.

(JP) Participation in the WV 811 quarterly meetings and participation on the WV Damage Prevention Board. As Chair of the Safety Committee for the Gas & Oil Association of WV (GOWV), we have offered a Damage Prevention Seminar for the last 3 years and intend on continuing the seminar moving forward. This seminar is developed in conjunction with WV 811 and includes participation from OHIO811, Kentucky 811, VA811, PA One Call System, Inc., and Common Ground Alliance (CGA).

I also attend other 811 Summits and conferences offered by surrounding states and organizations.

(ML) The company works to be aware of the latest technologies in our industry. We've found that attending and participating in 811 Damage Prevention Summits pays dividends. Not only do they provide training and dig law updates but they provide us with the opportunity to interact with other stakeholders in areas where we work.

4. How do you ensure all crew members are aware of the importance of damage prevention and safety?

(JK) We have a Job Safety Analysis (JSA) before the beginning of each project. Preventing damage to existing utilities and safety are two of the major topics discussed.

Talking Damage Prevention and Safety

(JP) Through training and JSA completion, all employees on the project are made aware of the importance of Damage Prevention measures and what they should do when there is a concern or question.

(ML) Safe digging by following proven policies is reinforced daily. Using good judgment is emphasized for each person on the team. Our onsite daily huddles and JSA's are an integral part of our commitment to safety and damage prevention.

5. How do you make sure the lines of communication stay open when it comes to keeping crews and utilities safe?

(JK) One way is the excavating and boring permits. They are designed so the foreman must call or talk to the project manager and discuss the project before excavation begins.

(JP) Morning meetings are conducted between the Project Superintendent and all Foreman on the project. The Project Safety Coordinator also participates in the meetings and can convey any areas of concern or focus.

(ML) Our daily onsite meetings are focused on jobsite issues and provide the Foreman and Project Supervisor pertinent information necessary to keep the job running efficiently and safely.

6. What is your top three list for a safe and successful project?

(JK) Life, Property, Integrity, and No Obstacles! – Planning, Communication, and Accountability. First, you must have a plan, then communicate the plan from the office to the field (pre-construction meetings), and last make sure everyone is held accountable for their part in the process.

(JP) No Personal/Employee Injuries, no property damages, and no negative environmental impacts.

(ML) Call 811 before digging, pre-job planning, and identifying onsite hazards and mitigations.

7. What do you think other stakeholders don't understand about an excavator's role in preventing damage?

(JK) I think most people fail to realize regardless of who's at fault for the damaged utility line, it affects everyone. Instead of pointing fingers, we need to unite and work on the problem - that's prevention.

(JP) It's the challenges an excavator may encounter when it comes to Damage Prevention. It is still too easy and convenient to blame the excavator as they are always the one that physically strikes/damages the utility. There is no denying that the excavator is the one putting the bucket in the ground, but the process of ensuring lines are properly and timely marked and identified, does not always provide the desired results it should. The challenge for the excavator is to not rely on the locate system alone to ensure lines are properly identified. Additional measures must be implemented and practiced to try and identify mismarked lines, lines that are not marked, or lines that are not known about at all. Excavators must understand their role in the damage prevention process is the most critical, because again, the excavator is the one sticking the bucket in the ground and is going to be the one blamed if a damage occurs.

(ML) I'm not sure they understand all successful projects are a team effort from start to finish. Owner/operators, locators, and excavators must work together instead of working as individual groups.

8. Based on your experience in the industry, are the challenges you face today different than when you first began?

(JK) It is harder today than when I first started. There are so many underground utilities now that production can sometimes be difficult. I think we are going to have to build a system where each utility has a designated space. I know we can't replace all utilities, but moving forward on new sub-divisions and replacement projects could start the process.

(JP) Very similar challenges from a Contractor/Excavator standpoint. Time is money. Always! The bottom line on a project is important but not a replacement for safety and damage prevention.

The Excavator/Contractor must continue to be involved as proactively as possible in Damage Prevention efforts. Instead of simply accepting that line strikes will occur, the Excavator can insist that proper notification and marking is conducted. Don't just assume that by waiting the required time before digging and not seeing any marks, that the area is clear.

(ML) In some ways the difficulties are the same, despite obvious technological improvements. The bottom line is all stakeholders need to work together and continuously improve communication efforts. Communication, logical thought process, and common sense are key to all our successes on these projects.

9. If you or your company participates in any of the local 811 or damage prevention meetings, what are the benefits of participating?

(JK) You learn so much by attending these meetings. You get to see the difficulties other contractors, locators, and utility owners face. If you let it, these meetings can change the way you think about certain things. They are also a good place to discuss the issues you may be facing within your business.

(JP) The meetings can be a valuable resource, making you aware of any law changes or best practices being discussed in the industry. They allow for review of other damages and lessons learned I can bring back to my company to implement. The contacts you meet can make a difference in creating a more efficient line of communication which is critical for successful projects.

(ML) It is a great way to stay up to date with local changes and policies, but mainly provides an opportunity to interact with other stakeholders to discuss challenges, difficulties, and possible solutions. It is the best way to strengthen our relationships with those stakeholders that we're depending on for a successful project. ESG

Excavation Best Practices

Chapters from CGA Best Practices 21.0.
For the complete Excavation Best Practices, see CGA Best Practices 21.0 at BestPractices.CommonGroundAlliance.com

5 Excavation
5.01 811 Facility Locate Request
5.02 Delineate Area of Proposed Excavation
5.03 Locate Reference Number
5.04 Pre-Excavation Meeting
5.05 Facility Relocations
5.06 Separate Locate Requests
5.07 811 Center Access (24/7)
5.08 Positive Response
5.09 Facility Owner/Operator Failure to Respond
5.10 Locate Verification
5.11 Documentation of Marks
5.12 Work Site Review with Company Personnel
5.13 811 Center Reference at Site
5.14 Contact Names and Numbers
5.15 Facility Avoidance
5.16 Federal and State Regulations
5.17 Marking Preservation
5.18 Excavation Observer
5.19 Excavation Tolerance Zone
5.20 Excavation within Tolerance Zone
5.21 Mismarked Facilities
5.22 Exposed Facility Protection
5.23 Locate Request Updates
5.24 Facility Damage Notification
5.25 Notification of Emergency Personnel
5.26 Emergency Excavation
5.27 Backfilling
5.28 As-Built Documentation
5.29 Trenchless Excavation
5.30 Emergency Coordination with Adjacent Facilities
5.31 No Charge for Providing Underground Facility Locations
5.32 Vacuum Excavation
5.33 Facility Owner Provides a Monitor During Excavation
5.34 Designing and Depicting for the Protection of Known Underground Facilities ESG

Digital Safe Digging Resources

Call811.com

Visiting Call811.com has proven to be a preventive measure in excavation safety and utility damage prevention. Research has revealed contacting 8-1-1 before digging significantly helps avoid incident, injury, harm to the environment, and even death.

Notify your state's 811 center by contacting 811 or making an online request 2-3 days before work begins. Visit Call811.com to find information about your state's specific notification period requirement, your 811 center, and online service availability.

The 811 center will transmit information to affected utility operators.

ClickBeforeYouDig.com

Another digital safety resource is ClickBeforeYouDig.com. This resource helps safely identify buried utility lines.

How to use the portal:
Click on the province or state in which you are planning to dig for information about the notification service in that area. Follow the links to visit the local damage prevention center website or click the CONTRACTOR button to place a locate request for that region. ESC

How One City Created a Process to Reduce Damage to Their Underground Utilities

BY **JOHNNY LUNSFORD,** OPERATIONS MANAGER, ROGERS WATER UTILITIES

In 2019 as a utility provider, we recognized a significant problem emerging in our service area. Unfortunately, many of these issues were caused by utility boring companies damaging our underground water and sewer infrastructure - critical services upon which our customers rely. Consequently, we needed to develop a solution to address this disruptive problem before it got bigger. The solution needed to address the immediate issue while also minimizing potential future harm to our infrastructure.

We conducted a comprehensive review to clearly and thoroughly describe the damages that had been caused. The comprehensive review revealed the problematic practices of utility boring companies were a primary cause of the issues, but it also revealed the issues were not solely caused by the utility bore companies.

DIRECTRICES PARA REACCIONAR EN EMERGENCIAS

811

Click Before You Dig

PÓSTER DE SEGURIDAD PROVEIDO POR PIPELINE ASSOCIATION FOR PUBLIC AWARENESS

CONOZCA LOS PELIGROS

- El gas natural y otros productos de petróleo son inflamables y queman. Si la piel está expuesta, serias irritaciones pueden ocurrir. Los gases escapados pueden desplazar el oxígeno.
- La electricidad hará descargas o cortocircuito a tierra produciendo temperaturas que son cuatro veces más intensas que la temperatura del sol. Como mínimo quemaría la piel y dañaría los organos internos. Los altos voltajes de electricidad pueden hacer arco a distancias considerables a través del aire. Usted debe estar consiente de cables aéros de alto voltaje y aleje cualquier parte del equipo por lo menos a 10 pies de distancia de los cables aéreos.
- El agua a alta presión pueden causar heridas graves. Las aguas residuales contienen bacterias que puede ser de alto riesgo para la salud. Los gases del alcantarillado son inflamables y queman.

RECONOZCA LAS CONDICIONES PELIGROSAS

- Los charcos de liquido, la tierra soplando, los sonidos siseantes, las nubes de vapor, los olores a gas, las burbujas en agua estancada, la vegetación completamente seca, y la tierra congelada o hielo alrededor de gasoductos/ oleoductos son todas señales de escapes de gas natural o petróleo y deben de ser tratadas como una emergencia.
- Trate el contacto con cualquier cable eléctrico como una emergencia sin tener en cuenta si aparece dañado o no o si está cortado. Ésto incluye el contacto con cables aéreos de alto voltaje.
- Con frecuencia los servicios usan zanjas conjuntamente poniéndolo a usted en un mayor riesgo en las zanjas que támbien tienen electricidad.
- La tierra mojada o descolorida es un indicio de un escape de agua/alcantarillado y debe ser tratada como una condición de emergencia potencial.

EXCAVATION EMERGENCIES

PROVIDED BY PIPELINE ASSOCIATION FOR PUBLIC AWARENESS

KNOW THE HAZARDS

- Natural gas and other petroleum products will ignite and burn. If exposed to the skin, serious irritations may occur. Escaping gases can displace oxygen.
- Electricity will arc or short to ground producing heat that is up to four times greater than the heat of the sun. At a minimum, it will burn skin and damage internal organs. High voltage electricity can arc significant distances through the air. Be aware of all aboveground high voltage lines and keep any part of the equipment at least 10 feet away from overhead lines.
- Water under high pressure can cause serious injury. Wastewater contains bacteria that can be a significant health risk. Sewer gas will ignite and burn.

RECOGNIZE UNSAFE CONDITIONS

- Pools of liquid, blowing dirt, hissing sounds, vapor clouds, gaseous odors, bubbles in standing water, dead vegetation, and frozen soil or ice next to pipelines are all signs of a natural gas or petroleum pipeline leak and should be treated as an emergency.
- Treat contact with any electric line as an emergency regardless of whether it appears undamaged, damaged or severed. This includes contact with aboveground high voltage lines.
- Utilities often jointly use trenches placing you at greater risk in trenches that also have electricity.
- Wet or discolored soil is an indication of a water/sewer leak and should be treated as a potential emergency condition.

EMERGENCY CONDITIONS INVOLVING UNDERGROUND FACILITIES INCLUDE:

Leaks, ruptures, explosions, fires, severe settling or soil movement, weakened or damaged facilities and similar instances where immediate action is necessary to prevent loss of life, injury to persons, or damage to property and the environment. Every situation is different and must be evaluated on the individual circumstances. Below are general emergency response guidelines for various emergency/damage situations involving underground facilities.

RESPOND IMMEDIATELY

NATURAL GAS & PETROLEUM LIQUIDS

1. Turn off equipment, if it can be done safely.
2. Abandon all equipment and get a safe distance away.
3. Avoid open flames or anything that might start a fire. Do not start motor vehicles or electrical equipment. Remove all ignition sources (cigarettes, cell phones, or anything that could create a spark or static electricity).
4. Evacuate the area and keep people out.
5. Do not make contact with escaping liquids.
6. Do not operate any pipeline valves.
7. Call 911 or your local fire, police, or sheriff's office.
8. Do not try to put out a fire. If it's burning, let it burn; ask local firefighters to observe and protect adjacent property.
9. Contact the facility operator immediately to report the condition.

ELECTRICITY

1. Only move equipment in contact with overhead or underground electric lines if you can move it away safely.
2. If excavator equipment remains in contact with electric equipment, it's safest to stay on equipment (unless on fire) until rescue workers arrive; keep others away. If you must abandon equipment, jump clear of it, landing with both feet on the ground at the same time, and then only shuffle or hop away.
3. If a buried electrical line is struck in wet soil/conditions, the ground may become energized for a large area around the strike. *(Hopping or shuffling away will help reduce your risk to step potential.)*
4. Contact the facility operator immediately to report the condition.
5. If appropriate, call 911 for local emergency response.

WATER/SEWER

1. Evacuate the area immediately and keep people out. Leaking water can fill a trench quickly making escape extremely difficult.
2. Do not close valves in order to stop flooding. Closing the wrong valve may affect fire flows and/or possible containment of potable systems.
3. Be careful of damaged high-pressure water lines because even the slightest scratch or vibration can cause pipelines to break.
4. Move carefully around trenches with wet walls. Wet soil can easily cause suffocation.
5. Avoid contact with wastewater. Do not wade in or work around wastewater.
6. Sewer gas is flammable; avoid open flames or anything that might start a fire.
7. Contact the facility operator immediately to report the condition.

FIBER/COMMUNICATION

1. If a fiber optic cable is cut, do not look into the end of it. Serious eye damage may occur.
2. Contact the facility operator and report the condition.

NEVER BURY A DAMAGED FACILITY!

Even a minor scrape, nick, cut, tear, break, or dent should be reported to the facility owner immediately. If not promptly repaired, it could result in a future leak, service outage, explosion, accident, injury, or death.

CONDICIONES DE EMERGENCIA que afectan las instalaciones subterráneas incluyen: escapes, rupturas, explosiones, incendios, hundimiento severo o movimiento de tierra, debilitamiento y daño de gasoductos/oleoductos/acueductos, y casos similares donde es necesaria la acción inmediata para impedir pérdida de vidas, heridas a personas, o daños a propiedad y el medio ambiente. Cada situación es diferente y debe ser evaluada individualmente según las circunstancias. A continuación se dan directrices generales de emergencia para reaccionar ante varias emergencias/situaciones donde hay daños que afectan las instalaciones subterráneas.

REACCIONE INMEDIATAMENTE

GAS NATURAL Y LÍQUIDOS DERIVADOS DEL PETROLEO

1. Apague el equipo, si lo puede hacer con seguridad.
2. Abandone todo el equipo y aléjese a una distancia segura.
3. Evite llamas abiertas o cualquier cosa que pueda prender fuego. No arranque vehículos de motor o equipo eléctrico. Retire todas las fuentes de ignición (cigarrillos, teléfonos celulares, o cualquier cosa que pueda crear una chispa o electricidad estática).
4. Evacúe el área y no deje pasar a la gente.
5. No haga contacto con escapes de líquidos.
6. No maneje las válvulas de gasoductos/oleoductos.
7. Llame al número de emergencia 911 o llame a las oficinas locales del cuerpo de bomberos, policía, o sheriff.
8. No trate de apagar el fuego. Si está ardiendo déjelo quemar; pídale a los bomberos que observen y protejan la propiedad adyacente.
9. Inmediatamente póngase en contacto con a la compañía que opera los gasoductos/oleoductos para reportar las condiciones.

ELECTRICIDAD

1. Sólo mueva equipo que esté en contacto con cables eléctricos aéreos o subterráneos si usted lo puede mover con seguridad.
2. Si el equipo excavador continúa en contacto con equipo eléctrico, es más seguro quedarse en el equipo (a no ser que esté en llamas) hasta que lleguen los trabajadores de rescate: no deje que otros se acerquen. Si tiene que abandonar el equipo, salte lejos del equipo, cayendo con ambos pies a la misma vez, y luego sólo aléjese arrastrando los pies o saltando
3. Si hay impacto con un cable enterrado y la tierra está mojada, la tierra en el área alrededor del impacto puede estar energizada. (Reduzca el riesgo de electrocutarse alejándose saltando o arrastrando los pies.)
4. Inmediatamente póngase en contacto con la compañía que opera las instalaciones para reportar la emergencia
5. Si es apropiado llame al número de emegencia 911 para ayuda local.

ACUEDUCTO/ALCANTARILLADO

1. Evacúe el área de inmediato y no deje que la gente se acerque. Un escape de agua puede llenar una zanja rápidamente haciendo su escape sumamente dificil.
2. No cierre las válvulas para impedir inundaciones. Cerrar la válvula equivocada puede impedir que el agua pase por los ductos de agua que usan los bomberos para apagar fuegos y/o posiblemente contaminar el sistema de agua potable.
3. Tenga cuidado con los ductos de agua de alta presión debido a que cualquier leve rasguño o vibración puede causar una ruptura.
4. Muévase con cuidado alrededor de zanjas que tienen las paredes mojadas. Tierra mojada puede derrumbarse fácilmente y causar asfixia.
5. Evite contacto con aguas residuales. No camine o trabaje alrededor de aguas residuales.
6. Los gases del alcantarillado son inflamables; evite llamas abiertas o cualquier cosa que pueda iniciar un incendio.
7. Inmediatamente póngase en contacto con la compañía que opera los acueductos y alcantarillados para reportar la emergencia.

FIBRA ÓPTICA/COMUNICACIÓN

1. Si el cable de fibra óptica está cortado, no mire adentro de la punta del cable. Graves daños a los ojos pueden ocurrir.
2. Inmediatamente póngase en contacto con la compañía que opera la fibra óptica para reportar la situación.

NUNCA ENTIERRE EQUIPO DAÑADO

Nunca entierre equipo dañado como cables eléctricos, gasoductos, oleoductos, o ductos de cualquier tipo. Informe de inmediato a la compañía afectada cualquier leve rasguño, corte, rotura, o abolladura. Si la reparación no es hecha rápidamente en el futuro pueden resultar escapes, interrupción de servicios, explosiones, accidentes, heridas, o muerte.

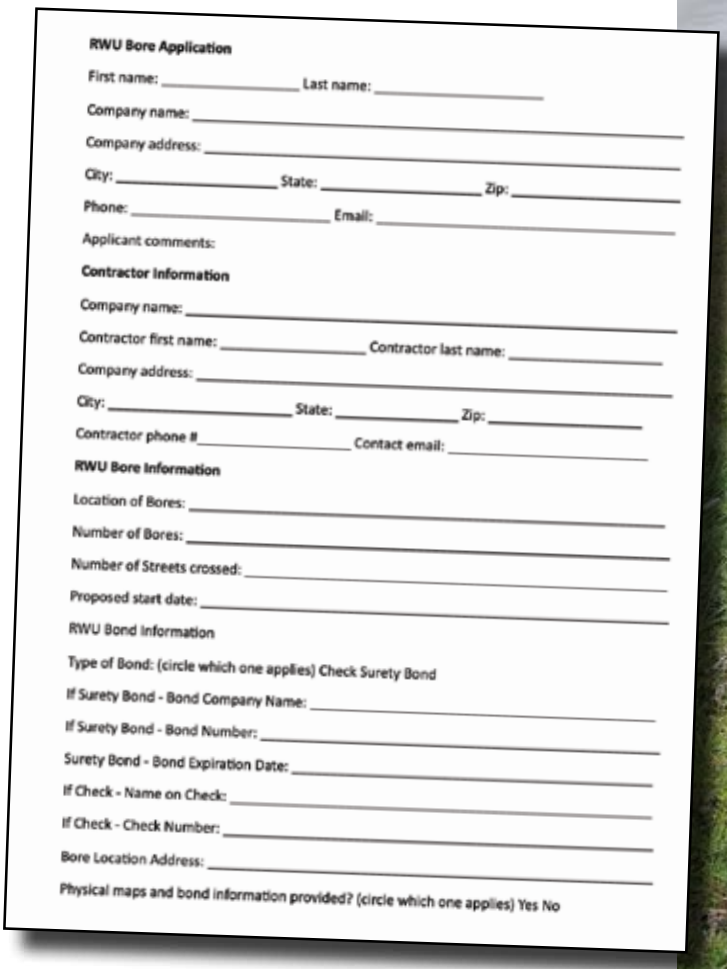
We concluded that we are also failing with our inaccurate locates and miscommunications between the utility boring companies and the utility itself. To prevent further damage, we needed to develop a process that helped both parties understand how their individual behaviors contributed to the overall prevention efforts. This would result in a more reliable and workable process. Resolving these troubling behaviors would require time and effort. To enhance the protection of our underground facilities, we needed to establish a policy that promoted shared responsibility.

- We initiated open communication with utility boring companies and our locators to establish proper procedures for accurately identifying the locations of our underground utilities.
- We emphasized to the utility companies the critical need to expose and visually inspect our buried infrastructure before starting any drilling or boring work. This would enable us to verify the accuracy of

the locator marks and identify any issues. Unfortunately, we found that some utility companies were still subcontracting the work to unqualified crews who showed little regard for the integrity of our underground system. These subcontractors seemed solely focused on getting the job done quickly and moving on to the next project, rather than performing the work responsibly. The utility continues to struggle with locators who are not performing their duties properly. As a result, the company has had to discipline and remove some employees from those positions. **So, this plan was not working, and we needed to come up with something new.**

What finally brought everything to where we are today, came about when a subcontractor working for one of the contractors caused significant issues that impacted our water lines.

In a single subdivision, this subcontractor damaged every water service line on one side of the street. Our crew had to spend two days repairing those damaged services. As a result, the affected homes were without water for three days while we flushed and chlorinated the lines and had a boil order issued until we could get good sam-



RWU Bore Application

First name: _____ Last name: _____

Company name: _____

Company address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Applicant comments:

Contractor Information

Company name: _____

Contractor first name: _____ Contractor last name: _____

Company address: _____

City: _____ State: _____ Zip: _____

Contractor phone # _____ Contact email: _____

RWU Bore Information

Location of Bores: _____

Number of Bores: _____

Number of Streets crossed: _____

Proposed start date: _____

RWU Bond Information

Type of Bond: (circle which one applies) Check Surety Bond

If Surety Bond - Bond Company Name: _____

If Surety Bond - Bond Number: _____

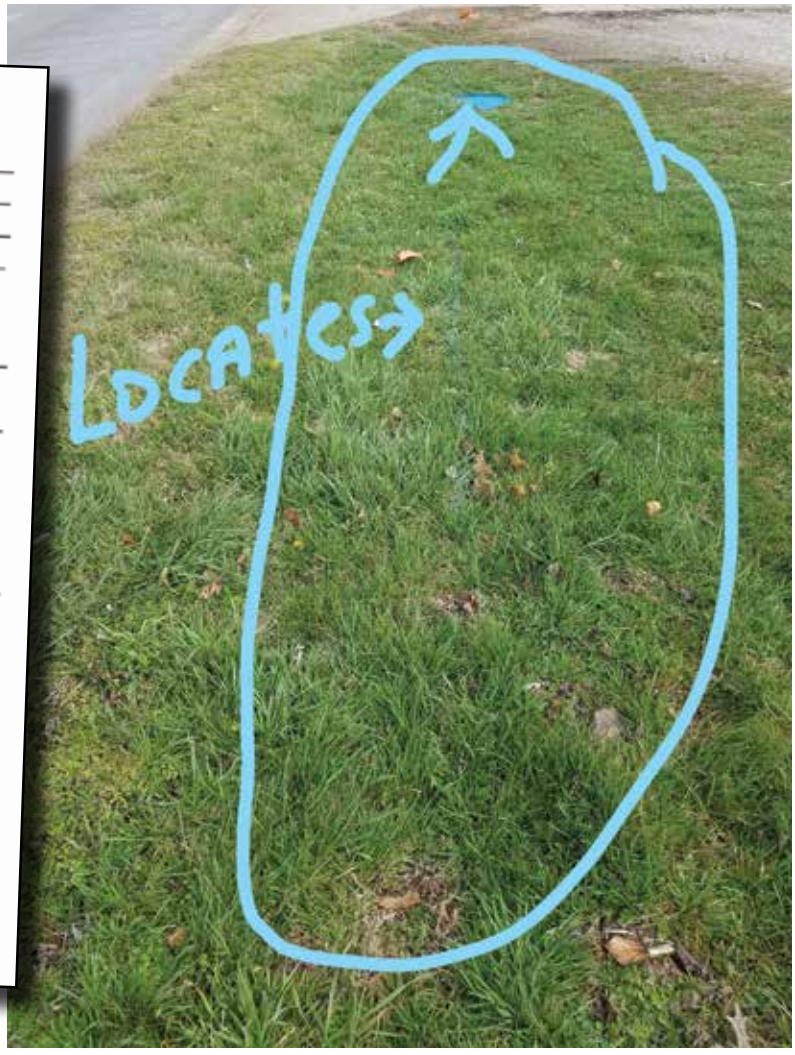
Surety Bond - Bond Expiration Date: _____

If Check - Name on Check: _____

If Check - Check Number: _____

Bore Location Address: _____

Physical maps and bond information provided? (circle which one applies) Yes No



ples back. Then, another subdivision was hit the same way even after every one of the services lines was mark correctly. Since they were unable to follow the proper 811 rules, we decided to create a **Utility Resolution and City Ordinance, as outlined via the QR code below.**

The initial resistance came from contractors who were already following best practices, as they saw no need for the new requirements that didn't apply to all contractors in our city. But we continued to provide communication and support to the utility boring companies. We emphasize the importance of having a positive outlook and we both needed to be patient with the process.

The utility appointed a single point of contact to manage communication with the participating contractors. This employee would coordinate pre-construction meetings after the companies had submitted their applications and bonds. If a subcontractor is working for them, the subcontractor will need to be the ones to attend the meeting and have the bond in the subcontractor's name.

At the pre-construction meeting we provide each contractor with a site map and instruct them to call us if the actual site locates differ from the map. We also advise them to contact us if they are unable to locate the water and sewer lines during excavation. We will come out to assist in identifying their locations. We inform them that they will be held responsible for any damage to the line if the map is not onsite when we arrive, or the exposing work has not been completed, even if the locates are inaccurate.

If they had taken all necessary precautions, but still hit us due to inaccurate markings or an unmarked line, we would be at fault and they would not be held responsible.

- We also invite all the electric, gas, and cable companies to these pre-construction meetings.
- We gave each one of our locators a raise with the emphasis that it requires them to communicate with contractors in the field.
- We purchased a GPR for the hard to locate lines. After implementing these new protocols, we, as a utility company, saw a reduction in system damages and improvements in overall performance.
- We fostered stronger trust with bore companies as they recognized our collaborative, rather than adversarial, approach.
- The boring companies found that new policies leveled the playing field for them because it required close quotes on all work.
- Plus, it helps run all the here today, gone tomorrow, bore contractors out of town because they couldn't provide the bond's or follow rules. This opened up more work for them.

Utility was able to go from "damage prevention" to "prevent damage". ESG

KNOW THE HAZARDS

PRODUCTS AND FACILITIES SAFETY INFORMATION FOR PUBLIC OFFICIALS

NATURAL GAS

is a naturally occurring resource formed millions of years ago because of heat and pressure acting on decayed organic material. It is extracted from wells and transported through gathering pipelines to processing facilities. From these facilities, it is transported through transmission pipelines to distribution pipeline systems. The main ingredient in natural gas is methane (approximately 94 percent).

Natural gas is odorless, colorless, tasteless and nontoxic in its natural state. An odorant (called mercaptan) is normally added when it is delivered to a distribution system. At ambient temperatures, natural gas remains lighter than air. However, it can be compressed (CNG) under high pressure to make it convenient for use in other applications or liquefied (LNG) under extremely cold temperatures (-260° F) to facilitate transportation.

PETROLEUM GAS

is a mixture of gaseous hydrocarbons, primarily propane, butane and ethane. These products are commonly used for cooking, heating and other industrial applications. They are easily liquefied under pressure and are often stored and transported in portable containers labeled as Liquified Petroleum Gas (LPG). When transported in transmission pipelines they may also be identified as Highly Volatile Liquids (HVLs) or Natural Gas Liquids (NGLs). Vaporized LPG may also be found in smaller gas distribution systems. Typically, LPG is a tasteless, colorless and odorless gas. When transported via transmission pipelines it normally will not have odorant added. Odorant is added when LPG is offloaded to a distribution pipeline system or transport tanks to facilitate leak detection. Ethylene and propylene do have a faint natural odor like petroleum.

PETROLEUM LIQUIDS

is a broad term covering many products, including: crude oil, gasoline, diesel fuel, aviation gasoline, jet fuel, fuel oil, kerosene, naphtha, xylene and other refined products. Crude oil is unrefined petroleum that is extracted from beneath the Earth's surface through wells. As it comes from the well, crude oil contains a mixture of oil, gas, water and other impurities, such as metallic compounds and sulfur. Refinement of crude oil produces petroleum products that we use every day, such as motor oils and gasoline. Crude oil is transported from wells to refineries through gathering or transmission pipelines. Refined petroleum products are transported in transmission pipelines to rail or truck terminals for distribution to consumers. Odorant is not added to these products because they have a natural odor.

ANHYDROUS AMMONIA

is the liquefied form of pure ammonia gas. It is a colorless gas or liquid with an extremely pungent odor. It is normally transported through transmission pipelines and is used primarily as an agricultural fertilizer or industrial refrigerant.

CARBON DIOXIDE

is a heavy gas that is normally transported in transmission pipelines as a compressed fluid. It is a naturally occurring, colorless, odorless and tasteless gas used in various industries, including meat packaging, produce, petroleum, beverage industries. Under normal conditions, carbon dioxide is stable, inert and nontoxic. However, it acts as asphyxiant when released in large concentrations to the atmosphere.

ETHANOL

(also called ethyl alcohol) is a colorless liquid that is widely used as an additive to automotive gasoline. It may be transported in buried transmission pipelines. Ethanol has a natural odor similar to gasoline and will mix easily with water.

HYDROGEN GAS

is commonly produced from the steam reformation of natural gas. It is frequently used near its production site, with the two main uses being petrochemical processing and ammonia production. Hydrogen is a flammable gas that is colorless, odorless and lighter than air. It is nontoxic, but can act as an asphyxiant.

"SOUR" CRUDE OIL & "SOUR" GAS

refer to products containing high concentrations of sulfur and hydrogen sulfide. Products containing little or no sulfur are often referred to as "sweet." Hydrogen sulfide (H_2S) is a toxic, corrosive contaminant found in natural gas and crude oil. It has an odor like the smell of rotten eggs or a burnt match. Exposure to relatively low levels of hydrogen sulfide (500 ppm) can be fatal.

Scan here for more excavator safety resources!

SCAN ME

LEAK, HAZARD & EMERGENCY RESPONSE INFORMATION

	NATURAL GAS	PETROLEUM GAS	PETROLEUM LIQUIDS	ANHYDROUS AMMONIA	CARBON DIOXIDE	ETHANOL	HYDROGEN GAS	SOUR CRUDE OIL (H_2S)	SOUR GAS (H_2S)
INDICATIONS OF A LEAK									
SEE – liquid pooling on the ground			●			●		●	
SEE – a white vapor cloud that may look like smoke		●		●					
SEE – fire coming out of or on top of the ground	●	●					●		●
SEE – dirt blowing from a hole in the ground	●	●		●	●		●		●
SEE – a sheen on the surface of water		●	●					●	
SEE – an area of frozen ground in the summer	●	●			●		●		●
SEE – an unusual area of melted snow in the winter	●	●			●		●		●
SEE – an area of dead vegetation	●	●	●			●	●	●	●
SEE – bubbling in pools of water	●	●			●		●		●
HEAR – a loud roaring sound like a jet engine	●	●							●
HEAR – a hissing or whistling noise	●	●		●	●		●		●
SMELL – an odor like rotten eggs or a burnt match	1	1						●	●
SMELL – an odor like petroleum liquids or gasoline		●	●			●		●	
SMELL – an irritating and pungent odor				●				●	●
HAZARDS OF A RELEASE									
Highly flammable and easily ignited by heat or sparks	●	●	●			●	●	●	●
Will displace oxygen and can cause asphyxiation	●	●		●	●		●		●
Vapors are heavier than air and will collect in low areas		●	●	●	●	●		●	●
Contact with skin may cause burns, injury or frostbite		●	●	●	●	●	●		●
Initial odor may be irritating and deaden the sense of smell								●	●
Toxic and may be fatal if inhaled or absorbed through skin				●				●	●
Vapors are extremely irritating and corrosive				●				●	●
Fire may produce irritating and/or toxic gases	●	●	●	●		●	●	●	●
Runoff may cause pollution			●	●		●		●	
Vapors may form an explosive mixture with air	●	●	●			●	●	●	●
Vapors may cause dizziness or asphyxiation without warning	1	1			●		●		
Is lighter than air and can migrate into enclosed spaces	●						●		
EMERGENCY RESPONSE									
Avoid any action that may create a spark	●	●	●			●	●	●	●
Do NOT start vehicles, switch lights or hang up phones	●	●	●			●	●	●	●
Evacuate the area on foot in an upwind and/or uphill direction	●	●	●	2	2	●	●	2	2
Alert others to evacuate the area and keep people away	●	●	●	2	2	●	●	2	2
From a safe location, call 911 to report the emergency	●	●	●	●	●	●	●	●	●
Call the pipeline operator and report the event	●	●	●	●	●	●	●	●	●
Wait for emergency responders to arrive	●	●	●	●	●	●	●	●	●
Do NOT attempt to close any pipeline valves	●	●	●	●	●	●	●	●	●
Take shelter inside a building and close all windows				2	2			2	2

1 The majority of these products are naturally odorless and only certain pipeline systems may be odorized. Odorant can also fade or be scrubbed out when leaking products migrate through soil.

2 Sheltering in place is an alternative to evacuation when the products are toxic or the risk of fire is very low. Refer to "Shelter-In-Place or Evacuate Guidance Document" provided online at: **qrco.de/Evacuation**

Pipeline Products & Facilities

NATURAL GAS is a naturally occurring resource formed millions of years ago because of heat and pressure acting on decayed organic material. It is extracted from wells and transported through gathering pipelines to processing facilities. From these facilities, it is transported through transmission pipelines to distribution pipeline systems. The main ingredient in natural gas is methane (approximately 94 percent). Natural gas is odorless, colorless, tasteless and nontoxic in its natural state. An odorant (called mercaptan) is normally added when it is delivered to a distribution system. At ambient temperatures, natural gas remains lighter than air. However, it can be compressed (CNG) under high pressure to make it convenient for use in other applications or liquefied (LNG) under extremely cold temperatures (-260° F) to facilitate transportation.

PETROLEUM GAS is a mixture of gaseous hydrocarbons, primarily propane, butane and ethane. These products are commonly used for cooking, heating and other industrial applications. They are easily liquefied under pressure and are often stored and transported in portable containers labeled as Liquified Petroleum Gas (LPG). When transported in transmission pipelines they may also be identified as Highly Volatile Liquids (HVLs) or Natural Gas Liquids (NGLs). Vaporized LPG may also be found in smaller gas distribution systems. Typically, LPG is a tasteless, colorless and odorless gas. When transported via transmission pipelines it normally will not have odorant added. Odorant is added when LPG is offloaded to a distribution pipeline system or transport tanks to facilitate leak detection. Ethylene and propylene do have a faint natural odor like petroleum.

PETROLEUM LIQUIDS is a broad term covering many products, including: crude oil, gasoline, diesel fuel, aviation gasoline, jet fuel, fuel oil, kerosene, naphtha, xylene and other refined products. Crude oil is unrefined petroleum that is extracted from beneath the Earth's surface through wells. As it comes from the well, crude oil contains a mixture of oil, gas, water and other impurities, such as metallic compounds and sulfur. Refinement of crude oil produces petroleum products that we use every day, such as motor oils and gasoline. Crude oil is transported from wells to refineries through gathering or transmission pipelines. Refined petroleum products are transported in transmission pipelines to rail or truck terminals for distribution to consumers. Odorant is not added to these products because they have a natural odor.

ANHYDROUS AMMONIA is the liquefied form of pure ammonia gas. It is a colorless gas or liquid with an extremely pungent odor. It is normally transported through transmission pipelines and is used primarily as an agricultural fertilizer or industrial refrigerant.

CARBON DIOXIDE is a heavy gas that is normally transported in transmission pipelines as a compressed fluid. It is a naturally occurring, colorless, odorless and tasteless gas used in the petroleum industry. Under normal conditions, carbon dioxide is stable, inert and nontoxic. However, it can act as an asphyxiant.

ETHANOL (also called ethyl alcohol) is a colorless liquid that is widely used as an additive to automotive gasoline. It may be transported in buried transmission pipelines. Ethanol has a natural odor like gasoline and will easily mix with water.

HYDROGEN GAS is commonly produced from the steam reformation of natural gas. It is frequently used near its production site, with the two main uses being petrochemical processing and ammonia production. Hydrogen is a flammable gas that is colorless, odorless and lighter than air. It is nontoxic, but can act as an asphyxiant.

"SOUR" CRUDE OIL AND "SOUR" GAS refer to products containing high concentrations of sulfur and hydrogen sulfide. Products containing little or no sulfur are often referred to as "sweet". Hydrogen sulfide (H2S) is a toxic, corrosive contaminant found in natural gas and crude oil. It has an odor like the smell of rotten eggs or a burnt match. Exposure to relatively low levels of hydrogen sulfide (500 ppm) can be fatal. ESG

The TRUE Cost of Pipeline Damages

The cost of damaged pipes can easily be underestimated when only repair costs are tracked and documented. Improve your understanding of the real costs of a damage with this checklist, based on insight from experienced professionals who have spent years working in the industry.

What percent of hard and soft costs does your company collect? How do damages affect your reputation?

Trackable Costs:

May or May Not Be Collected or Recoverable

- External collection costs/Agency commissions
- Barricades/Traffic Control
- Permits (city/county/state/provincial) to install replacement pipes
- Legal fees and litigation costs
- Exposing the damage for repair
- Materials used in repair
- Restoration of the area
- Actual cost of internal labor, including dispatching crews for gas shut-offs
- Heavy equipment used
- Generator/Power equipment
- Food, lodging, travel expense

Overlooked/Difficult to Track

- Lost customers
- Customer loss of use (refunds/credits)
- Resolution of customer complaints
- Engineering/reengineering due to the cut
- Work load delays
- Damage data capture and submission (software and/or manual)
- Emergency 811 ticket notifications
- Facility owner records updates

Soft Costs

- Negative public feedback
- Difficulty maintaining customer relationships, especially large businesses, with inconsistent services

Societal Costs

- Businesses closing
- Employee down time
- Road closures/traffic delays

Time

- Damage site investigator
- Collection efforts
- Out of service complaints
- Insurance resolution discussions
- Overtime for unexpected increases in workloads
- Employee time/travel for deposition and trial

Emergency Services

- Emergency response dispatching and labor (i.e. fire departments, etc.)
- Emergency mobilization (Contractor/Locator)

Investing in damage prevention improves your bottom-line and keeps your work force continuously focused on proactive work.

acts

actsnowinc.com

SAFETY TRAINING VIDEOS

A valuable collection of educational videos for excavators in the underground utility industry, the videos below have been curated from industry stakeholders around the country. Delve into the content contributed by these experts to fortify your knowledge and to further promote a culture of safety in your daily work activities.

#1 – Pipeline Safety for Excavators

• Discover essential information on preventing third-party pipeline damage. Explore the methods employed by operators to locate underground pipelines, guidelines for safe digging near pipelines, recognizing signs of a pipeline leak, and the appropriate response protocols in the event of a pipeline damage.

#2 – Excavation Emergencies

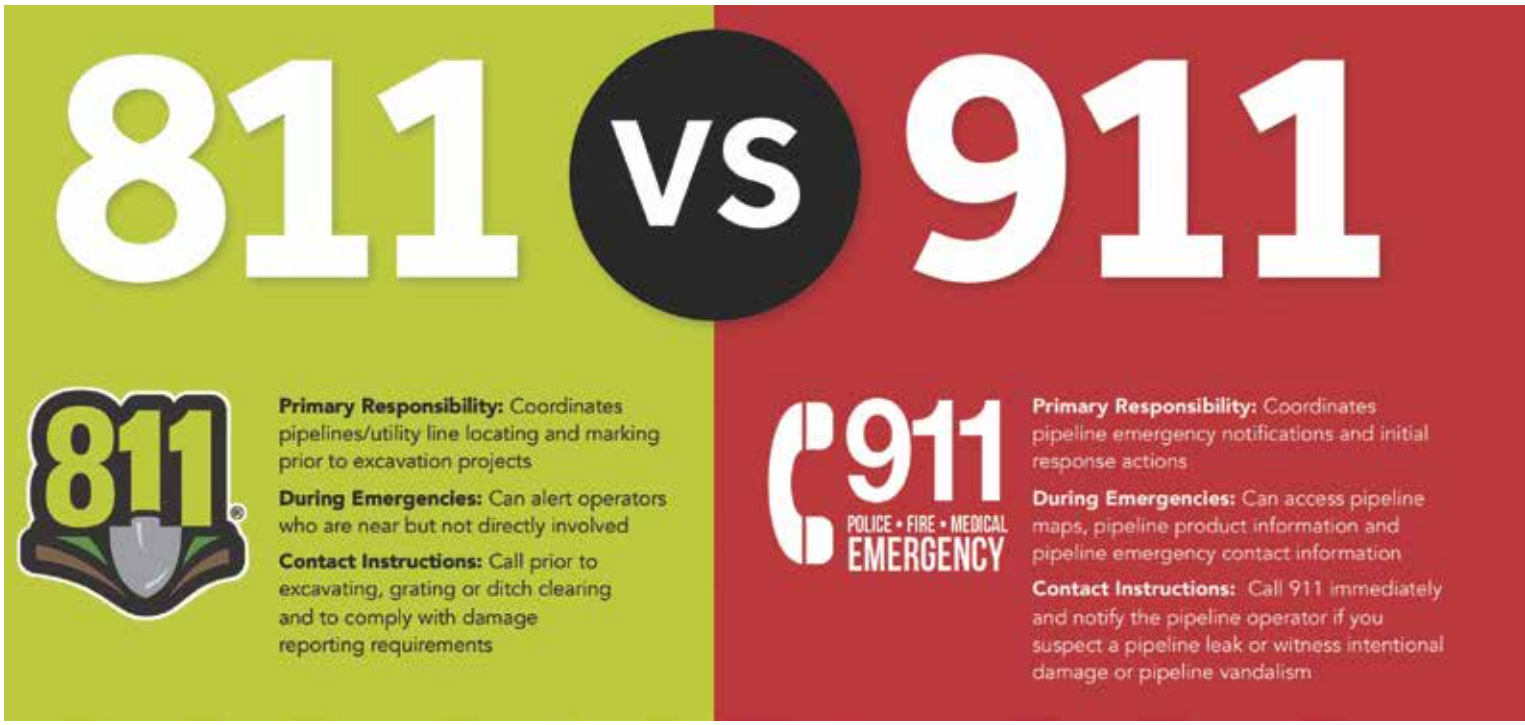
• Explore the significant topic of excavation emergencies, delving into real-world examples that underscore the importance of actively preventing these critical situations. Gain practical insights on how to address and navigate challenges effectively.

#3 – Excavations in Construction/Trenching

• Learn how to prevent construction worker fatalities. This video showcases the dangers of trenching and emphasizes OSHA rules such as sloping, shoring, and shielding to ensure worker safety.

#4 – 5 Steps to Safer Digging Toolbox

• This resource highlights five essential steps for safely excavating around underground utilities, emphasizing pre-marking, contacting 8-1-1, accurate information submission, careful digging within tolerance zones, and prompt reporting of any damage.



Community Liaison Services

Formerly known as the Community Assistance and Technical Services (CATS) Program

PHMSA has renamed its CATS program to "Community Liaison Services" to more appropriately align with current roles and responsibilities and better interface with various stakeholders.

Mission:
To advance PHMSA's pipeline safety mission by proactively engaging with pipeline stakeholders, providing technical expertise, and leveraging technology, data, and information to reduce pipeline risks and influence change through program and policy development.

Vision:
To serve as "trusted" and "credible" stewards of public safety and environmental protection by raising awareness and influencing change to continuously improve pipeline safety.

If you need assistance with any of the following pipeline safety related matters, please contact a PHMSA Community Liaison today:

- Pipeline safety policy/programs (damage prevention, public awareness, emergency response, PIPA, etc.)
- Pipeline stakeholder engagement and outreach
- Pipeline technical services and support (public inquiries, whistleblowers, post incident/accident communications, siting and permit initiatives)
- Questions about pipeline safety in your community

Community Liaisons are located within each PHMSA region.

Community Liaison Services Program Manager
Marta Riendeau: Marta.Riendeau@dot.gov • Phone: (609) 354-8010

Central Region:
Illinois; Indiana; Iowa; Kansas; Michigan; Minnesota; Missouri; Nebraska; North Dakota; South Dakota; Wisconsin.
Angela Pickett: angela.pickett@dot.gov • Phone: (816) 329-3823
Sean Quinlan: sean.quinlan@dot.gov • Phone: (816) 329-3800

Southern Region:
Alabama; Florida; Georgia; Kentucky; Mississippi; North Carolina; Puerto Rico; South Carolina; Tennessee.
James Kelly: james.kelly@dot.gov • Phone: (404) 990-1848
Tiffany Baker: tiffany.baker@dot.gov • Phone: (404) 832-1164

Eastern Region:
Connecticut; Delaware; Maine; Maryland; Massachusetts; New Hampshire; New Jersey; New York; Ohio, Pennsylvania; Rhode Island; Vermont; Virginia; Washington, D.C.; West Virginia.
Nita Raju: Nitander.raju@dot.gov • Phone: (609) 771-7806

Southwest Region:
Arkansas; Louisiana; New Mexico; Oklahoma; Texas.
James 'Jay' Prothro: james.prothro@dot.gov • Phone: (713) 272-2832

Western Region:
Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington; Wyoming.
Dave Mulligan: david.mulligan@dot.gov • Phone: (720) 963-3193 ESG

CHANGES TO THE LAWS IN YOUR STATE

SUMMARY OF DAMAGE PREVENTION LAWS

JENNIFER REAMS, UNDERGROUND TECHNICAL ADVISOR
INFRASTRUCTURE COMPLIANCE CONCEPTS | JREAMS.ICC@GMAIL.COM

As states start to form various types of enforcement for their damage prevention laws, recognizing changes to these laws are becoming a little more complicated. Due to this, it is recommended that you stay involved with your state one call, review state codes, administrative codes, enforcement authority rule making decisions, state resolutions, and (of course) "Changes to the Laws in Your State" article that is produced yearly.

CALIFORNIA

SB778 Passed 09/22/2024: Damage prevention law changes are as follows: **(a)** Modifies excavation notification procedures in the event an excavation ticket expires., **(b)** Requires considerations when charging fees for locating obligations., **(c)** Revises requirements for the use of vacuum excavation equipment., **(d)** Revises damage notification requirements for excavators., **(e)** Revises some eligibility requirements to serve on the Californian Underground Facilities Safe Excavation Board., and **(f)** If an excavator requests additional locate information to determine the exact location; the utility operator shall provide this information within one working day if known.

https://www.usanorth811.org/
https://energysafety.ca.gov/who-we-are/undergroundsafetyboard/
https://digalert.org/

Colorado

Underground Damage Prevention Safety Commission Regulations 7 C.C.R. 1101-18 Adopted 11/08/2024; Effective 01/01/2025. Signifigant updates to this regulation are as follows: **(a)** Adds dredging and other underwater earth moving to the definition of excavation., **(b)** Defines home rule entity., **(c)** Establishes and defines a review committee as " A group of 3-5 members of the Underground Damage Prevention Safety Commission appointed to review a complaint of an alleged violation of the Act.", **(d)** Empowers the Review Committee to determine if a complaint is frivolous., **(e)** Defines response required of the term "by date"., **(f)** Specifies that a complaint form must be complete prior to the form being processed and receiving a hearing schedule., **(g)** Requests for postponement of hearings may be requested until the response "required by date"., **(h)** Adds procedures and document protocols for hearings., **(i)** Empowers the Safety Commission to establish enforceable standards for underground facility marking., and **(j)** Establishes a Damage Prevention fund and a Safety Commission Fund.

http://colorado811.org/
https://ops.colorado.gov/UDPSafetyCommission

Connecticut

Public Utilities Regulatory Authority Permitting Guidance Memo; Dated 01/30/2024. Addresses modifications made to Section 16-345-6 (Permits to require compliance) and encourages permitting agencies to implement these modifications. Suggestions include the following: Permit applications should have three options for complying with the CBYD regulations.

1. Requiring a CBYD number for situations where a contractor applies for a permit for work within the next 30 days, with a genuine need for immediate utility marking.
2. If a utility company is obtaining permits for a project that will be completed by subcontractors, no CBYD number is required to issue the permit
3. If the permit issuing agency determines that it will take longer than 30 days to issue a permit, no CBYD number is required to issue the permit

https://www.cbyd.com/
https://www.cbyd.com/resources/ct-cbyd-state-law-regulations

Georgia

PSC Rule 515-9-4-.14 entitled Georgia Underground Marking Standards; Amended 12/22/2023 Effective 01/11/2024: Updates to this rule include the following: **(a)** Clarification for the term "No conflict" when responding to a locate request. This should only be communicated by facility owners through positive response. Also, paint or stakes should be left at the proposed excavation if there is no conflict., **(b)** Adds the requirement for both paint and flags in particular environmental conditions., **(c)** Allows for the use of flags and stakes in addition to the use of paint for underground utility markings., (d) Clarifies marking standards for facilities that are bundled within a trench or that do not have enough separation for separate tones., **(e)** Updated standards for marking ducts., and **(f)** Clarification of utility markings for traffic control and traffic management systems.

PSC RULE 515-9-4-.02. entitled Definitions; Amended 12/22/2023 Effective 01/11/2024 Revised 04/22/2024: Requires a large project ticket for:

- Any contiguous geographical site or area that exceeds one (1) linear mile.,
- Any contiguous geographical site or area that will require an excavation of more than ninety (90) days.,
- Any contiguous geographical site exceeding ten (10) addresses, buildings, or lots/areas.,

https://www.georgia811.com/

Illinois

SB1438 Passed 07/28/2023 Effective 01/01/2024: This bill created the Illinois Dig Once Act. The purpose of this act is to minimize traffic interruptions, to enhance efficiency and coordination between the state, units of government, and utilities. The Department of Transportation, the Illinois State Toll Highway Authority, and the Department of Commerce and Economic Opportunity shall consult with the state One Call center to jointly develop a policy and rules to reduce the scale and number of repeated excavations related to roads, highways, tollways, and expressways for the installation and maintenance of broadband infrastructure and public utilities in rights-of-way.

HB 5546 Passed 07/01/2024 Effective 01/01/2025: Illinois made extensive changes to their damage prevention law. First, there are substantial additions and modifications of the definitions within the new law. Some highlights to these are as follows: **(a)** Damages

(Contact or dislocation of a facility during excavation that necessitates repair by the underground utility facility owner due to any partial or complete destruction of the facility, including, but not limited to, the protective coating, tracer wire, lateral support, cathodic protection, or housing for the line or device of the facility.), **(b)** Day ("Means any day, beginning at 12:00 a.m. and ending at 11:59 p.m. and does not include holidays recognized by JULIE, Saturdays, Sundays, and the day of the actual notice.), **(c)** Emergency notification request (means a request involving a condition (1) that constitutes an imminent danger to life, health, or property or a utility service outage (2) and that requires repair or action before the expiration of 2 days., **(d)** Excavation (any operation in which earth, rock, or other material in or on the ground is moved, removed, or otherwise displaced by means of any tools, power equipment or explosives, and includes, without limitation, grading, trenching, digging, ditching, drilling, augering, boring, tunneling, scraping, cable or pipe plowing, saw cutting or roadway surface milling when penetrating into the base or subbase of a paved surface, and driving)., and **(e)** Adds several exclusions to the definition of excavation but notably adds this to the exclusions "(2) An exclusion to this Section in no way prohibits a request from being made for the marking of facilities. (3) Any exception to excavation contained within this Section is not intended to remove liability that may be imposed against an individual or entity because of damage caused to a facility.,

Secondly, HB 5546 modified and introduced a great deal of procedural details to the damage prevention law as follows: **(a)** Specific excavation requirements that allows the facility owner to request to be on site during excavation near their facility. The excavator must comply with this request; however, the facility owner may not interfere with the excavation schedule., **(b)** Positive response requirements., **(c)** Obligations for design tickets., **(d)** Joint meet ticket obligations for excavators and facility owners., **(e)** Emergency ticket requirements and stakeholder obligations surrounding the emergency excavation., **(f)** Requires the excavator to notify the One Call center of an exposed unmarked facility., **(g)** Marking requirements for submerged facilities., **(h)** Pre-marking requirements., **(i)** Allows the facility owner to request an additional two days to complete marking obligations under particular circumstances, **(j)** Service laterals on or after 01/01/2026 shall be locatable., and **(k)** Provides enforcement procedural timelines for the Illinois Commerce Commission.

Once again, Illinois has undergone extensive changes to their damage prevention law. Prior to excavation, it is highly recommended to refer to the state One Call center website for education and additional training at website below.

https://www.illinois1call.com/

Indiana

IURC RM #22-03 Approved 07/26/2023 Effective 01/25/2024: Notable changes/additions from this new rule are as follows: **(a)** Clarification of marking requirements for underground utilities. (Underground facility operators shall mark their facilities not later than 7:00 a.m. at the prevailing time observed in Indianapolis, Indiana, on the working day after the elapse of two full working day periods from 7:00 a.m. to 6:00 p.m.), **(b)** The Commission, the pipeline safety division, or a person approved by the commission can conduct education that is deemed "training.", **(c)** Requires a gas underground utility to indicate if the facility is a service line and must provide size and type of pipeline if greater than 2" in diameter., **(d)** Life of a notification tickets expires at 11:59 p.m. on the twentieth day from the notification ticket request., **(e)** Underground gas utilities must notify the IURC of damage to their facilities within 30 days., **(f)** If a gas facility must reschedule a facility locate, it must now reschedule within the two full working days, log the time, date, and the person responsible for notification, and give the new date when the facilities will be located., **(g)** Clarification of the tolerance zone to indicate 24" on all sides (including each side, top, and bottom) of the facility., and **(h)** Gas operators must provide positive response to the One Call center.

HB1122 Passed 03/11/2024: This bill inserts some key points from IURC RM #22-03 (above) into code and builds upon this foundation as follows: **(a)** Clarification of tolerance zone to include the width of the underground facilities plus (2) feet; above, below, and in a full radius surrounding all outer limits of both the underground and aboveground facilities of the physical plant., **(b)** Working day hours are 7:00 a.m. to 6:00 p.m. et; prevailing time of Indianapolis, Indiana., **(c)** A provision that allows an excavator to start work prior to the two full working days if all affected operators have appropriately responded through the positive response.,**(d)** An excavation notice expires at 11:59 p.m. prevailing time (20) days after the date the notice is received by the association., **(e)** Underground utility operator will provide positive response., and **(f)** Excavator will provide an affirmative response to the one call that they have received positive response from all affected operators that were notified.

https://indiana811.org/

Iowa

HB2581 Passed 05/01/2024; Effective 07/01/2024: This bill changes the definition of 48-hour period to a period of 48 consecutive hours beginning at 6:00 a.m. the next business day from the day the notification center receives the notification excluding Saturday, Sunday and legal holidays.

Other notable changes include: **(a)** Defines locator to include persons both employed by the utility operator or/and under contract with the utility operator., **(b)** Adds two locators and two excavator as non-voting members to board of directors to the One Call center., **(c)** Obligates the Iowa One Call Center to establish a two way communication system for operators, locators and excavators., **(d)** All stakeholders shall make available records to the utilities board during investigation process., **(e)** Extends ticket life to 25 days., **(f)** Utility operator shall provide positive response within the 48- hour period., **(g)** Call center shall provide notice to excavator the status of completion of locates., **(h)** Locate marking flags shall include name of operator and contact number., **(i)** Special excavation requirements when excavating near pipelines operating at 150 psi or greater and/is or equal to 2" in diameter., **(j)** Provide a "no conflict" if facilities are not present within the 48-hour window., **(k)** Locating time limit violations to include civil penalties and assessed to the operator of the underground facility even if that operator contracts the locating., **(l)** At the direction of the Iowa Attorney General the utilities board shall investigate violation and submit finding to the Attorney General., and **(m)** The Utilities Board may independently receive and investigate violations.

https://iowaonecall.com/

Kansas

HB2226 Passed 04/24/2023 Effective 01/01/2024: This bill increases the life of a notification ticket to twenty calendar days.

Other notable inclusions are: **(a)** The allowance of virtual white lining for excavation sites., **(b)** Grants the state corporation commission the ability to adjust the extent of time the notice of intent to excavate is

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valid., **(c)** Grants the state corporation commission the ability to adjust the maximum number of days allowed to an operator for providing the location of the tolerance zone., and **(d)** All utility damage must be reporter to operator and Kansas 811.

https://kansas811.com/

Kentucky

SB174 Passed 03/29/2024; Effective 07/15/2024: **This bill provides** definitions for communications network, communications service provider and communication terminals.

Other key points are as follows: **(a)** Require that if damage is done to an underground gas or hazardous liquid facility and no attempt to locate the underground facility was made, the operator shall include in its report to the Public Service Commission the distance from the communications terminal that the damage occurred., **(b)** Require that the Public Service Commission submit a report to the Legislative Research Commission on or before December 1, 2025, detailing the number of damage reports from communications service providers that occurred in the area where they are allowed to use nonintrusive excavation., and **(c)** Exempts from the underground facility damage prevention requirements nonintrusive excavating of a depth not greater than 12 inches and within 12 inches of a communication service provider's own communications network.

https://kentucky811.org/

Louisiana

HB397 Passed 05/15/2024; Effective 01/01/2025: This bill modifies Louisiana Damage Prevention law by providing new definitions for large project excavation/demolition, marine excavator, and routine excavation/demolition. Further, the bill adds guidance to excavators and utility operators during large project excavations.

https://www.louisiana811.com/

Maine

SB2245 Passed 03/25/2024: First, this bill adds liquefied propane gas to the definition of underground facility. Secondly, the bill exempts from the definition of excavation both highway drainage culverts or under drains and liquefied propane gas distribution systems that have underground pipes located on a residential lot under particular circumstances.

Chapter 895 Underground Facility Damage Prevention Requirements Docket No 2024-00157 11/05/2024 Effective 12/11/2024: The Maine Public Utilities Commission modified Chapter 895 through the rulemaking process. Modifications include the following: **(a)** Definitions associated with Liquified Propane Gas consistent with §3360-A. Protection of Underground Facilities., **(b)**The Dig Safe System shall maintain its draw functionality to allow excavators to define a planned excavation area by drawing the confines of the planned excavation on Dig Safe System interactive maps., and **(c)** The location of the proposed excavation must be clearly identified and defined in Dig Safe's System.

https://www.digsafe.com/

Minnesota

HB3436 Passed 05/15/2024 Effective 08/01/2024: This bill has several notable changes to Minnesota damage prevention laws as follows: **(a)** Modification to the 48-hour notification requests will exclude the day of call and the 48-hour time clock begins at 12:01 a.m. the day after the notification is made (excluding weekends and holidays)., **(b)** Provides and allowance for excavator and utility operator to develop a written marking schedule that must be provided to the One Call center., **(c)** Requirements, procedures and documentation for on-site meetings (including what triggers mandatory on-site large project meetings)., **(d)** Updates to operator marking requirements to include operator name on flags and a combination of paint marks with flags, whiskers or stakes., **(e)** Mandatory white marking requirements (black paint to be used during winter months)., **(f)** Operators must provide a notification information report to the Minnesota Department of Public Safety Office of Pipeline Safety (MNOPS) each quarter (Some exemptions)., and **(g)** Design ticket and preconstruction meeting requirements.

Effective 01/01/2026: Operators that provide services to greater than 10,000 customers must use geospatial location information/equivalent technology to develop as-built drawings of newly installed or newly abandoned facilities if exposed in the excavation area. Other notable changes effective in 2026 are: **(a)** an excavator may provide electronic markings as an alternative to the physical markings if they provide the same level of information., **(b)** A utility operator may require that the excavator provide physical markings following submission of electronic marking.

Effective 01/01/2027: Operators that provide services to fewer than 10,000 customers must use geospatial location information/equivalent technology to develop as-built drawings of newly installed or newly abandoned facilities if exposed in the excavation area.

https://www.gopherstateonecall.org/

Mississippi

SB2603 Passed 04/15/2024; Effective 07/01/2024: Notable changes to Mississippi damage prevention law are as follows: **(a)** Added definitions for locate ticket request and trenchless excavation., **(b)** Exemptions from the notification requirements for facility locators under particular conditions., **(c)** Adds an "enforceable provision" that limits excavation notification ticket scope to work that can be reasonably completed within 14 days from the time the ticket is processed and not to include already excavation completed areas., **(d)** Renewal notification tickets may not include portions of excavation that is completed., **(e)** White marking requirements., and **(f)** Requirements for trenchless excavations.

https://www.ms811.org/

Nebraska

LB 683 Passed 05/26/2023; Effective 09/01/2024: Nebraska has made several signifigant changes to their underground damage prevention law as follows: **(a)** It shall be a violation for an excavator to provide notice of excavation for an area that cannot be reasonably started within seventeen calendar days., **(b)** It shall be a violation to request remarking that cannot be started or continued within fourteen

calendar days of remarking notification., **(c)** If the excavator receives notice of an alleged violation, excavator shall describe why the alleged violation occurred., **(d)** The Underground Excavation Safety Committee is created and representatives shall be appointed by the Governor. The Committee representatives are:

- The State Fire Marshal/designee
- Three operator representatives
- One operator alternate (in case operator representative is unavailable)
- Three excavator representatives
- One excavator alternate (in case excavator representative is unavailable)

(e) The Committee shall govern in accordance with rules and regulations promulgated/adopted by the State Fire Marshal and shall not meet less than monthly., **(f)** The Committee shall review investigations, determine if violation has occurred, and determine appropriate penalties., **(g)** Training may be assessed in lieu of or in addition to civil monetary penalties., **(h)** Violator is responsible of repayment of costs associated with violation investigations., and **(i)** Civil penalties in excess of ten thousand dollars shall be referred to Attorney General/prosecuting attorney for action of behalf of the state.

https://www.ne1call.com/

New Hampshire

Adopted Rule Chapter En 800 Underground Utility Damage Prevention Program; Effective 08/20/2024. This updated rule clarified: **(a)** damage and probable violations reporting requirements., **(b)** Updated to locators shall be trained in accordance with the National Utility Locating Contractors Association (NULCA) Professional Competence Standards for Locating Technicians fifth edition (2017)., and **(c)** Excessive excavator notifications (15 notifications in the same day by the same excavator) constitutes extraordinary circumstances provision.

https://www.digsafe.com/
https://www.energy.nh.gov/enforcement/underground-damage-prevention/811-dig-safe

Oklahoma

HB4095 Approved 04/23/2024 Effective 11/01/2024: Notable changes are as follows: **(a)** Definitions added for watch and protect ("Means an operator or its designated representative is present to observe an excavation within (10) feet of the operator's marking of its existing underground facility"), large projects, and Pre-excavation meeting request., **(b)** The "watch and protect" shall be signified through the positive response with the name and phone number of utility representative. Once this positive response is received, no excavation may take place without a representative on site. The representative and excavator shall document the agreed upon date and time the "watch and protect" excavation will take place., **(c)** The notification ticket shall contain the name and phone number of the excavator field contact with actual knowledge of the excavation site and project., and **(d)** Large project requirements and obligations.

https://okie811.org/

Ohio

HB315 Effective 04/03/2025: This bill adds a non-voting advisory seat to the Underground Technical Committee.

https://oups.org/

Pennsylvania

SB1237 Effective 10/29/2024: This bill made substantial modifications as follows: **(a)** Added definition for damage prevention investigator, drawing, sketch, trenchless technology, and violation., **(b)** Modifies definition of excavation to include dredging,., **(c)** Modifies the definition of locate request to add the term notification ("means a communication or notification")., **(d)** Provides an exemption for locating facilities; "A facility owner may not be required to locate lines or facilities installed before April 30, 2018, unless the facility owner has existing maps of the lines or facilities and the facility owner's existing maps meet the specifications of the One Call System's Member Mapping Solutions"., **(e)** Adds "Facility owners shall make reasonable efforts during the excavation phase to locate or notify excavators of the existence of any known lines and abandoned lines"., **(f)** Facility owner will document communications with excavator regarding inability to locate facilities., **(g)** Facility owner to enter a "timely" final response to all locate requests., **(h)** Facility owners to comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of receipt of the request., **(i)** Defined ticket limit of "1000' or Intersection to Intersection, whichever is greater, along the same street, within the same political subdivision"., **(j)** Additional requirements for design ticket obligations., **(k)** To utilize the best practices of Common Ground Alliance during trenchless technologies., **(l)** Includes the ability to impose administrative penalties if the project owner refuses to compensate excavator for extra work due to utility location or limit the excavators rights within contract provisions., **(m)** No delegation of duty for the One Call notification., **(n)** Includes the ability to impose administrative penalties for falsifying an emergency excavation., **(o)** Appeal process for violation determinations., **(p)** 270 day time limit for date of alleged violation occurrence for committee to review and make determination., **(q)** Additional monetary penalties of $100.00 per day (not to exceed $5000.00) if training is not met or penalty not paid within the allotted timeframe., and **(r)** New sunset provision of 12/31/2031.

https://www.pa1call.org/

Rhode Island

SB 2849 Passed 06/12/2024: This bill expanded the definition of damage and clarified 911 notification requirements.

https://www.digsafe.com/
https://ripuc.ri.gov/rhode-island-digsafe

South Dakota

South Dakota 811 modified Administrative Rules 20:25:30:05:01 Effective 01/01/2025: A current ticket may not be updated more than twice after the original ticket was requested or after 63 days have elapsed from the date the original ticket was requested.

South Dakota 811 modified Administrative Rules 20:25:01:01 Effective 01/01/2025: Added positive response definitions and requirements.

https://sdonecall.com/

Tennessee

HB 2286/SB2260 Passed 04/03/2024; Effective 07/01/2024: This bill modified the following: **(a)** Definition of emergency., **(b)** Emergency notification requirements and procedures., **(c)** Penalties for misrepresentation of emergency notification., **(d)** Penalty structure for

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violations., **(e)** Use of monies from the damage prevention fund.

https://www.tenn811.com/

Utah

SB 145 03/18/2024; Effective 05/01/2024: Noteworthy changes are as follows: **(a)** New definitions for backfill, business hours, electronic positive response system, excavation notice, no response notice, holiday, mark, municipality, and tolerance zone., **(b)** Life of a ticket changed to 21 calendar days., **(c)** Additional obligations for excavators to confirm particular requirements have been met prior to the start of excavation, **(d)** If a utility operator receives a no response notice; they shall mark facilities or make arrangements to mark facilities within 4 business hours., **(e)** New protocols when a facility is damaged., **(f)** Provision that the notification center is not responsible for obligations of excavators and utility operators., and **(g)** a 48-hour period, occurring during business days that includes any day except Saturday, Sunday, or a holiday, that begins at 8:00 a.m. on the first business day after notice has been submitted."

https://www.bluestakes.org/

Vermont

SB305 Signed by Governor 05/30/2024; Effective 11/01/2024: The bill increases the notification wait time to 72 hours from 48 hours.

https://publicservice.vermont.gov/regulated-utilities/engineering/underground-utility-damage-prevention-uudp-dig-safe-r
https://www.digsafe.com/

Virginia

CASE NO. URS-2024-00068 20VAC5-309. Rules for Enforcement of the Underground Utility Damage Prevention Act (amending 20VAC5-309-190) Introduced 04/23/2024; Effective 07/22/2025:
The amendments enable the implementation of new electronic white lining technology, which will assist in defining planned areas of excavation for the further prevention of damage to underground utility lines.

https://va811.com/

West Virginia

Notable updates effective 08/01/2024:
- Notification locate requests are limited to 2500' per linear ticket
- Notification locate request expiration date of 15 days after issued

https://wv811.com/

2025 Bills Introduced

Delaware proposed dig rule change
https://delmarva811.com/resources/proposed-de-law-changes/
Mississippi HB1191/SB2365 Introduced 01/20/2025
Mississippi HB594/SB2230 Introduced 01/20/2025
Missouri HB752/SB133 Introduced 01/09/2025
New Mexico (NM811) Proposed changes to member manual 2025
North Dakota HB1153 Introduced 01/22/2025
Oklahoma SB345 Prefile 02/03/2025
Oklahoma SB355 Prefile 02/03/2025
Oregon dig rule changes for 2025. More information on potential implementation found at: https://digsafelyoregon.com/2025/01/09/2025-changes-to-oregon-dig-rules/
South Carolina H3571 Introduced 01/29/2025

ENFORCEMENT AGENCIES

Enforcement of the damage prevention laws in your state can be a bit confusing to navigate. Questions such as: who is enforced, who enforces it, and what is enforceable are frequent throughout the US. To help you with your navigation below we have categorized states in accordance with enforcement venues. Please note some states have more than one avenue of enforcement and may appear more than once in the list below. The Pipeline Hazardous Materials Safety Administration also has complied extensive documentation for each state, which can be found at the following link:
https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm?nocache=6529

- **Public Utilities Commission:** Alaska, Arizona, California, Connecticut, Delaware, Georgia, Hawaii, Illinois- Illinois Commerce Commission, Indiana- Indiana Utility Regulatory Commission, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, Virginia, West Virginia, Wisconsin
- **Attorney General:** Arkansas, District of Columbia, Iowa, Nevada, South Carolina, Texas, Utah, Nebraska, Wyoming
- **Relevant County Court:** Alabama, Alaska, Arkansas, New Mexico,
- **Division of Safety:** Washington
- **Division of Occupational and Professional Licenses:** Idaho
- **Standalone Damage Prevention Boards/Committees/ Authorities:** Alabama, Colorado (Under the Department of Labor and Employment), Maryland, Mississippi, Puerto Rico, North Carolina, Idaho
- **Office of Energy Infrastructure Safety:** California
- **Railroad Commission:** Texas
- **Department of Energy:** New Hampshire
- **Department of Labor:** Montana
- **Department of Natural Resources:** Louisiana; California
- **State One Call:** Iowa, North Dakota, South Dakota, Wyoming
- **Law Enforcement:** Florida
- **Federal Office of Pipeline Safety:** Maine (may defer), Alaska
- **Department of Consumer and Regulatory Affairs:** District of Columbia

ESG

Notification Center and State Law Directory

Informational purposes only. Information and laws are subject to change. Consult your local Notification Center website for updated information. ACTS Now, Inc attempted to verify all information as of publication date, and accepts no responsibility for missing or incorrect information.
Note: Voice tickets may also be another acceptable form of ticket submission.

You can reach your local Notification Center in the U.S. by dialing 811.

811 Know what's below. Call before you dig.

	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
ALABAMA / Alabama 811 / 800-292-8525																							
Website: al811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full working days (not including day of notification) **Marks Valid:** 20 working days **Law Link:** al811.com/law	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	12" *	Y	Y	Y	N	N	18"
	*Agricultural purposes only																						
ALASKA / Alaska Dig Line, Inc. / 800-478-3121 or 907-278-3121																							
Website: 811ak.com **Hours:** 8:00 AM - 5:00 PM, M-F/Emergency 24/7 **Advance Notice:** 2-10 business days based on location **Marks Valid:** 15-20 business days based on location **Law Link:** 811ak.com/faq	N	Y	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	24"*
	*24-30" based on proposed depth of dig																						
ARIZONA / Arizona 811 / 800-782-5348																							
Website: arizona811.com **Hours:** 6:00 AM - 5:00 PM, M-F **Advance Notice:** 2 full working days(excludes weekends and holidays) **Marks Valid:** 15 working days **Law Link:** arizona811.com/resources/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	N	N	Y	Y	N	N	24"
ARKANSAS / Arkansas 811 / 800-482-8998																							
Website: arkansas811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 to 10 working days **Marks Valid:** 20 working days **Law Link:** arkonecall.com/statelaw/statelaw.aspx	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	Y	Y	N	Y	18"
CALIFORNIA																							
Underground Service Alert of Northern CA & NV **USA North 811 / 800-642-2444** **Website:** usanorth811.org **Hours:** 24 x 7 **Advance Notice:** 2 working days, not including the day of notification **Marks Valid:** 28 days **Law Link:** usanorth811.org (Quick Links / Law & Excavation Manual)	N	Y	Y	N	Y	Y	Y*	Y	Y	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	Y	24"
Underground Service Alert of Southern California / 800-422-4133 **Website:** digalert.org **Hours:** 6:00 AM - 7:00 PM, M-F **Advance Notice:** 2 working days to 14 calendar days not including date of notice **Marks Valid:** 28 days **Law Link:** https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=5.&title=1.&part=&chapter=3.1.&article=2	N	Y	Y	N	Y	Y	Y*	Y	Y	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	Y	24"
	*DOT and non-pressurized sewer lines, storm drains and drain lines exempt																						
COLORADO / Colorado 811 / 800-922-1987																							
Website: co811.org • **Hours:** 24 hours **Advance Notice:** 2 days, not to include the day of notice **Marks Valid:** 30 days **Law Link:** colorado811.org/one-call-legislation/	N	Y	Y	Y	Y	Y	Y*	N	N	Y	N	Y	N	N	N	Y	Y	Y	Y	Y	N	Y	18"
	* DOT exempt																						
CONNECTICUT / Call Before You Dig / 800-922-4455																							
Website: www.cbyd.com **Hours:** 7:00 AM - 5:00 PM, M-F; Emergencies 24 Hours **Advance Notice:** 2 full working days up to 30 calendar days (excludes weekends, holidays and the day of notification) **Marks Valid:** 30 days **Law Link:** www.cbyd.com/resources/ct-cbyd-state-law-regulations#	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	Y	18"
DELAWARE / Miss Utility of Delmarva / 800-282-8555																							
Website: missutility.net/delaware **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** must start within 10 calendar days, no expiration as long as marks still visible and scope does not change. **Law Link:** delcode.delaware.gov/title26/c008/index.shtml	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	N	N	N	N	Y	Y	N	N	24"
FLORIDA / Sunshine 811 / 800-432-4770																							
Website: sunshine811.com **Hours:** 7:00 AM - 6:00 PM **Advance Notice:** 2 full business days (10 if dig site is underwater) **Marks Valid:** 30 days **Law Link:** sunshine811.com/law	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	24"

Notification Center and State Law Directory

HELP US STAY UP TO DATE.
Directory information is also available online at *actsnowinc.com*. Report any updates to this directory by calling 501-548-6363.

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Click Before You Dig.com

	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					Tolerance Zone (either side of the utility plus the width of the utility)
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	
GEORGIA / Georgia 811 / 800-282-7411																							
Website: Georgia811.com **Hours:** 7:00 AM - 6:00 PM, M-F • (24/7 emergency) **Advance Notice:** 2 business days (excluding day of call) **Marks Valid:** 30 calendar days **Law Link:** georgia811.com/index.php/laws-policies/	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N*	N	N	N**	N	Y	Y	Y	Y	Y	18”
	* Routine road maintenance ** Farming activities																						
HAWAII / Hawaii One Call Center / 866-423-7287 / Tickets Fax: 877-695-2466																							
Website: callbeforeyoudig.org **Hours:** 24 hours, 7 days **Advance Notice:** 5 workings days, not to exceed 28 calendar days **Marks Valid:** 28 calendar days **Law Link:** callbeforeyoudig.org/law.htm	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	N	N	N	Y	Y	Y	N	N	30”
IDAHO																							
DIG LINE / 800-342-1585 **Website:** digline.com **Hours:** 24 hours **Advance Notice:** 2 business days **Marks Valid:** 28 Days **Law Link:** https://legislature.idaho.gov/statutesrules/idstat/title55/T55CH22/	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	Y	24”
BONNER/BOUNDRY One Call / 800-626-4950 **Website:** passwordinc.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y	N	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	N	24”
SHOSHONE/BENEWAH One Call / 800-398-3285 **Website:** passwordinc.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y	N	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	N	24”
KOOTENAI COUNTY One Call / 800-428-4950 **Website:** kootenaicounty811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	N	Y	24”
ILLINOIS																							
JULIE, INC. / 800-892-0123 **Website:** illinois1call.com • **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours notice (two business days), but no more than a 14 calendar day advance notice prior to the start of excavation. **Marks Valid:** 28 calendar days **Law Link:** illinois1call.com/lawandenforcement/	N	Y	N	N	Y	Y	Y	N	Y*	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	18”
811 CHICAGO / 312-744-7000 **Website:** ipi.cityofchicago.org/Digger **Hours:** 24 hours a day, 7 days a week **Advance Notice:** 48 hours • **Marks Valid:** 28 days **Law Link:** https://codelibrary.amlegal.com/codes/chicago/latest/chicago_il/0-0-0-2651040	N	Y	N	N	Y	Y	Y	Y	Y*	Y	Y	Y	N	N	Y	Y	N	Y	N	Y	N	N	18”
	*When possible																						
INDIANA / Indiana 811 / 800-382-5544																							
Website: indiana811.org • **Hours:** 24 hours, 365 days **Advance Notice:** 48 hours notice (two working days), but no more than a 20-calendar day advance notice prior to the start of excavation. **Marks Valid:** 20 calendar days **Law Link:** indiana811.org/wp-content/uploads/2019/06/IC-8-1-26-1.pdf	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	24”
IOWA / Iowa One Call / 800-292-8989																							
Website: iowaonecall.com • **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours, excluding Saturdays, Sundays, and legal holidays **Marks Valid:** 20 calendar days **Law Link:** iowaonecall.com/Default.aspx?tabid=404#iowa	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y*	N	Y	Y	Y	N	Y	18”
	*Normal farm operations less than fifteen inches																						

Know what's below. Call before you dig.

Expand public awareness by visiting call811.com. You will find a variety of downloadable elements available for use free in your company/organization's existing campaigns.

Note: Voice tickets may also be another acceptable form of ticket submission.

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	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
KANSAS / Kansas 811 / 800-344-7233																							
Website: kansas811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full working days(not including day of notice) **Marks Valid:** 15 calendar days **Law Link:** kansasonecall.com/static/pdf/KUUDPA_04.03.2010.pdf	N	Y	Y	Y	Y	Y	Y	N	N	Y	N	N	N	Y*	Y	Y	N	N	Y	Y	N	N	24"
	*Homeowner retains responsibility for any damages due to digging																						
KENTUCKY / Kentucky 811 / 800-752-6007																							
Website: kentucky811.org **Hours:** 24 hours/7 days **Advance Notice:** 2 working days **Marks Valid:** 21 calendar days **Law Link:** kentucky811.org/the-dig-law	N	Y	N	Y	Y	Y	N	N	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	Y	24"
LOUISIANA / Louisiana 811 / 800-272-3020																							
Website: louisiana811.com **Hours:** 7:00 AM - 6:00 PM, Emergency Locates 24/7 **Advance Notice:** 2 Business Days **Marks Valid:** 20 Days/30 Days for Agriculture, Forestry, Marine **Law Link:** louisiana811.com/index.php/dig-law	N	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	Y	N	Y	N	Y	Y	Y	N	Y	18"
MAINE / Dig Safe System, Inc. / 888-344-7233																							
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(excluding weekends and holidays) **Marks Valid:** 60 days; must start within 30 days **Law Link:** http://www.digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
MARYLAND / Miss Utility (Western Shore) / 800-257-7777																							
Website: www.missutility.net **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** 12 business days **Law Link:** www.missutility.net/maryland/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	Y*	N	N	N	N	Y	Y	N	N	18"
	*Hand dig only up to a depth of 6". Mechanized equipment must call.																						
Miss Utility of Delmarva (Eastern Shore) / 800-441-8355 **Website:** missutilitydelmarva.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** 12 business days **Law Link:** www.missutility.net/maryland/	N	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	N	Y	N	N	N	N	Y	Y	N	N	18"
MASSACHUSETTS / Dig Safe System, Inc. / 888-344-7233																							
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(excluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
MICHIGAN / Miss Dig System, Inc. / 800-482-7171																							
Website: missdig811.org **Hours:** 24 hours **Advance Notice:** 3 business days(excluding weekends and holidays) **Marks Valid:** 3 weeks to 6 months **Law Link:** missdig811.org/education/public-act-174.html	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	N	Y	18"
MINNESOTA / Gopher State One Call / 800-252-1166 or 651-454-0002																							
Website: gopherstateonecall.org **Hours:** 24 hours **Advance Notice:** 48 hours(excluding weekends and holidays) **Marks Valid:** 14 days **Law Link:** revisor.leg.state.mn.us/statutes/?id=216D	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	N	Y	24"
MISSISSIPPI / Mississippi 811, Inc. / 800-227-6477 / Tickets Fax: 601-362-7533																							
Website: ms811.org **Hours:** 24 hours, 7 days **Advance Notice:** 3 working days **Marks Valid:** 14 working days **Law Link:** ms1call.org/One Call-law	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	24"	12"	Y	Y	Y	N	Y	18"
	*Less than 16"																						
MISSOURI / Missouri One Call System / 800-344-7483 / Tickets Fax: 573-635-8402																							
Website: mo1call.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 working days, not counting day of request **Marks Valid:** As long as visible **Law Link:** mo1call.com/manual_law.php	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y*	N	Y	Y	Y	N	N	24"

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	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					Tolerance Zone (either side of the utility plus the width of the utility)
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	
MONTANA																							
MONTANA 811 / 800-424-5555 **Website:** montana811.org **Hours:** 24 hours, 365 days **Advance Notice:** 2 business days **Marks Valid:** 30 days **Law Link:** montana811.org/montana-dig-law.html	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y*	N	Y	Y	Y	Y	Y	Y	N	18”
	*Only under certain circumstances																						
NEBRASKA / Nebraska811 / 800-331-5666																							
Website: ne1call.com **Hours:** 24 hours, 365 days **Advance Notice:** 2 to 10 business days excluding holidays and weekends **Marks Valid:** 17 Days **Law Link:** ne1call.com/ne-law-enforcement/nebraska-statutes/	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	18”
NEVADA / USA North 811 / 800-642-2444																							
Underground Service Alert of Northern CA & NV **Website:** www.usanorth811.org **Hours:** 24/7 **Advance Notice:** 2 working days, not including the date of notification **Marks Valid:** 28 days **Law Link:** usanorth811.org (Quick Links/Law & Excavation Manual)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	Y	N	N	24”
NEW HAMPSHIRE / Dig Safe System, Inc. / 888-344-7233																							
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(exluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18”
NEW JERSEY / New Jersey One Call / 800-272-1000 / Tickets Fax: 800-705-4559																							
Website: nj1-call.org **Hours:** 24 hours **Advance Notice:** 3 full business days **Marks Valid:** 45 business days **Law Link:** nj1-call.org/nj-law/	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	N	N	24”
NEW MEXICO / New Mexico One Call, Inc. dba NM811 / 800-321-2537 / Tickets Fax: 800-727-8809																							
Website: nm811.org **Hours:** 7:00 AM - 5:00 PM, M-F / Emergencies & Damages: 24 hours **Advance Notice:** 2 working days, not including the day of the notification **Marks Valid:** 15 Days **Law Link:** nm811.org/new-mexico-811-law/	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	Y	18”
NEW YORK																							
DIG SAFELY NEW YORK / 800-962-7962 **Website:** digsafelynewyork.com **Hours:** 24 hours, 365 days **Advance Notice:** 2 to 10 working days(Excluding day of call) **Marks Valid:** 10 working days **Law Link:** digsafelynewyork.com/resources/nys-code-rule-753	N	Y	N	N	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N	N	24”
NEW YORK 811 / 800-272-4480 **Website:** newyork-811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 to 10 business days **Marks Valid:** 10 working days **Law Link:** newyork-811.com/excavators/code-753-at-a-glance	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N	N	24”
NORTH CAROLINA / North Carolina One Call Center, Inc. / 800-632-4949																							
Website: nc811.org **Hours:** 24 hours, 365 days **Advance Notice:** 3 full working days **Marks Valid:** 15 working days **Law Link:** nc811.org/north-carolina-law.html	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	N	24”

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811 Know what's **below.** **Call** before you dig.

Column groups: TICKETS (FAX, Online, Mobile); STATE LAWS & PROVISIONS (Statewide Coverage, Civil Penalties, Emergency Clause, Mandatory Membership, Excavator Permits Issued, Mandatory Premarks, Positive Response, Hand Dig Clause, Damage Reporting); NOTIFICATION EXEMPTIONS (DOT, Homeowner, Railroad, Agriculture, Depth); NOTIFICATIONS ACCEPTED (Damage, Design, Emergency, Overhead, Large Projects); Tolerance Zone (either side of the utility plus the width of the utility).

State	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
NORTH DAKOTA / North Dakota One Call / 800-795-0555 **Website:** ndonecall.com **Hours:** 24 hours **Advance Notice:** 2 Full Business Days **Marks Valid:** 21 calendar days **Law Link:** legis.nd.gov/cencode/t49c23.pdf?20130530105605	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	N	N	24”
OHIO **OHIO811 / 800-362-2764** **Website:** OHIO811.org **Hours:** 24 hours, 7 days **Advance Notice** 48 hours but not more than 10 working days **Marks Valid:** As long as visible and work begins within 10 days of original ticket **Law Link:** oups.org/law	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	18”
OKLAHOMA / Okie811 / 800-522-6543 **Website:** okie811.org **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours excluding date of notification, weekends and legal holidays **Marks Valid:** 14 calendar days **Law Link:** okie811.org/thelaw	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	N	Y	24”
OREGON / Oregon Utility Notification Center / 800-332-2344 / Tickets Fax: 503-293-0826 **Website:** digsafelyoregon.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 Full Business Days **Marks Valid:** 45 days **Law Link:** digsafelyoregon.com/faqs/ounc_ors_oar.htm *Excavator direct entry Wildland Fire and Pre-Excavation Meeting Request Notification also accepted Voice tickets also accepted.	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	12”	N	Y	N	N	Y	Y	N	N	24”
PENNSYLVANIA / Pennsylvania One Call System, Inc. / 800-242-1776 **Website:** pa1call.org **Hours:** 24 hours, 7 days **Advance Notice:** 3 to 10 business days (construction), 10-90 days (design), at least 10 days (large projects) **Marks Valid:** as long as equipment is on site **Law Link:** pa1call.org/palaw * PennDot minor routine maintenance exempt if without 24” depth from highest spot in ROW * Municipal Roads - minor routine maintenance if within 18” depth from highest point in ROW ** Exemptions include PennDOT within state road DOT, Stripper Well Lines in Class 1 areas *** Large projects accepted online only	N	Y	Y	Y	Y	Y	Y**	N	Y	Y	Y	Y	N*	N	N	Y	N	Y	Y	Y	N	Y***	18”
RHODE ISLAND / Dig Safe System, Inc. / 888-344-7233 **Website:** digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(exluding weekends and holidays) **Marks Valid:** Must start within 30 days, as long as marks maintained **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18”
SOUTH CAROLINA / South Carolina 811 / 888-721-7877 **Website:** sc811.com **Hours:** 7:30 AM - 5:30 PM, M-F **Advance Notice:** 3 to 12 full working days notice(10-20 full working days notice subaqueous) **Marks Valid:** 15 working days **Law Link:** sc811.com/state-law/	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	N	24”
SOUTH DAKOTA / South Dakota 811 Center / 800-781-7474 **Website:** sdonecall.com/state-law/ **Hours:** 24 hours **Advance Notice:** 48 hours(excluding weekends and holidays) **Marks Valid:** 21 working days from start date and time on ticket **Law Link:** sdonecall.com/law.asp * Damage reporting required. All damage must be reported to the facility operator, or if the operator is unknown, to South Dakota 811 Center. ** For agricultural tilling and road and ditch maintenance to a depth of 18” only; homeowners have a 12” depth exception for tilling of soil and gardening	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y*	N	N	N	N	N**	Y	Y	Y	N	Y	18”
TENNESSEE / Tennessee 811 / 800-351-1111 **Website:** tn811.com • **Hours:** 24 hours **Advance Notice:** Not less than 3 working days, not more than 10 working days **Marks Valid:** 15 calendar days **Law Link:** https://www.tn.gov/content/dam/tn/publicutility/documents/uudeb/65-31-101etseq.pdf	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	N	24”

Notification Center and State Law Directory

HELP US STAY UP TO DATE.
Directory information is also available online at *actsnowinc.com*.

Note: Voice tickets may also be another acceptable form of ticket submission. Report any updates to this directory by calling 501-548-6363.

You can reach your local Notification Center in the U.S. by dialing 811.

	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					Tolerance Zone (either side of the utility plus the width of the utility)
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	
TEXAS / Texas811 / 800-344-8377																							
Website: texas811.org **Hours:** 24 hours **Advance Notice:** 48 hours (excluding weekends and holidays) **Marks Valid:** 14 working days **Law Links:** statutes.capitol.texas.gov/Docs/UT/htm/UT.251.htm	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	16"	Y	Y	Y	N	N	18"
UTAH / Blue Stakes of Utah 811 / 800-662-4111																							
Website: bluestakes.org **Hours:** 8:00 AM - 4:00 PM, M-F **Advance Notice:** 3 business days, 72 hours notice **Marks Valid:** 14 calendar day **Law Link:** le.utah.gov/xcode/Title54/Chapter8A/54-8a.html	N	Y	Y	Y	Y	N	Y	N	N	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	24"
VERMONT / Dig Safe System, Inc. / 888-344-7233																							
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours (excluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
VIRGINIA / Virginia 811 / 800-552-7001																							
Website: va811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 working days(excluding day of call) **Marks Valid:** 15 working days **Law Link:** va811.com/laws-and-regulation	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	24"
WASHINGTON / Washington 811 / 811 / 800-424-5500																							
Washington 811 **Website:** digsafewa.com **Northwest Utility Notification Center (NUNC)** **Website:** digsafewa.com **Inland Empire Utility Coordinating Council (IEUCC)** **Website:** digsafewa.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 45 days **Law Link:** washington811.com/wa-dig-law-rcw-19-122/	N	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	24"
WASHINGTON D.C. / District One Call / 800-257-7777																							
Website: missutility.net **Hours:** 24 hours, 7 days **Advance Notice:** 96-business hours **Marks Valid:** 15 business days **Law Link:** https://code.dccouncil.gov/us/dc/council/code/titles/34/chapters/27/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	18"
WEST VIRGINIA / West Virginia 811 / 800-245-4848																							
Website: wv811.com **Hours:** 24 hours **Advance Notice:** 2 days but not more than 10 **Marks Valid:** 10 days **Law Link:** wv811.com/one-call-law	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	N	24"
WISCONSIN / Diggers Hotline / 800-242-8511																							
Website: diggershotline.com **Hours:** 24 hours, 7 days **Advance Notice:** 3 working days **Marks Valid:** For duration of work if marks remain visible and work is continuous **Law Link:** docs.legis.wisconsin.gov/statutes/statutes/182/0175	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N	Y	18"

Know what's below. Call before you dig.

Expand public awareness by visiting call811.com. You will find a variety of downloadable elements available for use free in your company/organization's existing campaigns.

Note: Voice tickets may also be another acceptable form of ticket submission.

811 Know what's below. Call before you dig.

	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
WYOMING / One-Call of Wyoming, Inc. / 811 or 1-800-849-2476 (if out of state)																							
Website: onecallofwyoming.com **Hours:** 24 hours **Advance Notice:** 2 full business days **Marks Valid:** 14 business days **Law Link:** https://www.onecallofwyoming.com/wp-content/uploads/2022/10/WY-State-Statute.pdf	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	N	24"

Canadian One Call and Provincial Law Directory

Click Before You Dig / Cliquez Avant de Creuser

Canadian One Call Centres Committee

	TICKETS			PROVINCIAL LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
ALBERTA / Utility Safety Partners / 800-242-3447																							
Website: utilitysafety.ca **Hours:** 8:00 AM - 4:30 PM, M-F (Emergency or Online: 24/7) **Advance Notice:** 3 full working days **Marks Valid:** up to 30 days, determined by member	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	N	N	N	*	Y	Y	Y	Y	Y	1m (39")
* 300 mm (12") hand tools only																							
BRITISH COLUMBIA / BC 1 Call / 800-474-6886																							
Website: bc1c.ca **Hours:** 24 hours / 7 days **Advance Notice:** Regular & Project - 3 working days excluding weekends and holidays Large Project – 5 working days excluding weekends and holidays Planning & Design – 10 working days excluding weekends and holidays **Marks Valid:** 60 calendar days	N	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	Y	Y	N	Y	VARIES
MANITOBA / Click Before You Dig Manitoba / 800-940-3447																							
Website: ClickBeforeYouDigMB.com **Hours:** 8:00 AM - 5:00 PM **Advance Notice:** 3 full working days excluding weekends and holidays **Marks Valid:** Determined by member	N	Y	Y	Y	N	N	N	N	N	Y	Y	N	N	N	N	N	N	Y	N	Y	N	Y	VARIES
ONTARIO / Ontario One Call / 800-400-2255																							
Website: OntarioOneCall.ca **Hours:** 24 hours, 365 days **Advance Notice:** 5 working days **Marks Valid:** Minimum 60 days **Law Link:** www.ontario.ca/laws/statute/12o04	N	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	Y	VARIES
QUEBEC AND ATLANTIC PROVINCES / Info-Excavation / 800-663-9228																							
Website: info-ex.com **Hours:** 24 hours/7 days **Advance Notice:** 72 hours (3 working days) **Marks Valid:** Maximum 180 days	N	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	Y	Y	Y	Y	1m (39")
SASKATCHEWAN / Sask 1st Call / 866-828-4888																							
Website: sask1stcall.com **Hours:** 8:00 AM - 4:30 PM, M-F (Emergency 24/7) **Advance Notice:** 3 full working days **Marks Valid:** 30 days	N	Y	Y	Y	N	N	N	N	N	Y	N	N	N	N	N	N	N	Y	Y	Y	N	N	VARIES

PIPELINE OPERATOR CONTACT DIRECTORY

Company	EMERGENCY	NON-EMERGENCY	WEB ADDRESS
Aera Energy, LLC	(800) 247-5977	(661) 858-8752	www.crc.com
Alliance Pipeline	(800) 360-4706	(403) 231-7500	www.pembina.com
Amplify Energy Corp.	(307) 328-2348	(307) 392-2363	www.amplifyenergy.com/
Archer Daniels Midland of Illinois	(800) 620-1748	(218) 326-3495	http://www.adm.com
Archer Daniels Midland of Illinois - Enderlin	(800) 620-1748	(218) 244-3364	http://www.adm.com
Argent Midstream Solutions, LLC	(701) 664-3035	(214) 420-6754	http://www.silverhillenergy.com
Atmos Energy Corporation	(866) 322-8667	(888) 286-6700	www.atmosenergy.com
Aux Sable Midstream	(701) 628-9380	(701) 628-9393	www.auxsable.com
Avista Utilities	(800) 227-9187	(800) 227-9187	www.myavista.com
Basin Electric Power Cooperative	(800) 339-5616	(605) 542-7417	www.basinelectric.com
Belle Fourche Pipeline Co	(866) 305-3741	(701) 575-2205	www.truecos.com
Black Hills Colorado IPP, LLC	(719) 696-3220	(719) 696-3209	www.blackhillsenergy.com
Black Hills Energy	(888) 890-5554	(303) 566-3509	www.blackhillsenergy.com
Black Hills Energy - IA Gas	(888) 890-5554	(888) 890-5554	www.blackhillsenergy.com
Black Hills Power dba Black Hills Energy	(307) 757-3010	(307) 757-3010	www.blackhillspower.com
Bridger Pipeline LLC	(866) 305-3741	(701) 575-2205	www.truecos.com
Bridger Swan Ranch, LLC	(307) 634-5305	(307) 634-5305	www.granitepeakindustries.com
Butte Pipe Line Company	(866) 305-3741	(701) 575-2205	www.truecos.com
Caliber Midstream Partners, LP	(866) 535-2522	(303) 628-1410	www.calibermidstream.com
California Natural Resources Group	(888) 664-4435	(805) 477-9805	www.calnrg.com
California Resources Central Valley	(661) 763-6911	(661) 763-6363	www.crc.com
California Resources Elk Hills, LLC	(661) 763-6911	(661) 763-6363	www.crc.com
Calumet Montana Refining, LLC	(406) 761-4100	(406) 454-9887	www.montanarefining.com
Carbon California	(805) 531-3712	(805) 794-8593	www.carbonenergycorp.com
Cascade Natural Gas	(888) 522-1130	(888) 522-1130	www.cngc.com
Cedar Falls Utilities	(319) 268-6999	(319) 268-5280	www.cfu.net
Cenex Pipeline, LLC	(800) 421-4122	(406) 628-5443	www.chspipelines.com
Central Iowa Power Cooperative	(641) 782-5518	(641) 782-2158	www.cipco.net
Central Valley Gas Storage	(855) 303-2847	(530) 439-2607	www.cvgasstorage.com
Chevron Midstream Services, LLC	(800) 762-3404	(877) 596-2800	www.chevron.com
Chevron Pipe Line Company	(800) 762-3404	(877) 596-2800	www.chevron.com
Cheyenne Rail Hub, LLC	(307) 634-5305	(307) 634-5305	www.granitepeakindustries.com
CHS Inc. Terminals	(800) 421-4122	(855) 424-7747	www.chspipelines.com
CHS MRI Pipelines	(844) 721-6611	(855) 424-7747	www.chspipelines.com
CHS MRI Terminal	(844) 721-6611	(855) 424-7747	www.chspipelines.com
City of Blanding	(435) 678-2916	(435) 678-2791	www.blanding-ut.gov
City of Ellensburg	(509) 925-8534	(509) 962-7124	www.ci.ellensburg.wa.us
City of Fort Morgan	(970) 867-4350	(970) 542-3910	www.cityoffortmorgan.com
City of Lake City, Natural Gas Dept.	(386) 758-5405	(386) 758-5405	www.lcfla.com
City of Sioux Falls	(605) 367-8162	(605) 367-8162	www.siouxfalls.org
City of Walsenburg	(719) 738-1044	(719) 890-0049	www.cityofwalsenburg.com
Cobra Oil & Gas Corporation	(517) 563-8381	(989) 345-7903	www.cobraogc.com
Colorado Interstate Gas - MT, UT and Western W	(877) 712-2288	(800) 276-9927	www.kindermorgan.com
Colorado Interstate Gas - Western CO	(877) 712-2288	(800) 276-9927	www.kindermorgan.com
Colorado Springs Utilities	(719) 448-4800	(719) 448-4800	www.csu.org
Contango Resources - Midwest	(307) 437-9500	(307) 437-9500	www.contango.com
Contango Resources - Monell	(307) 437-9500	(307) 437-9500	www.contango.com
Continuum Midstream, LLC	(877) 587-0026	(806) 278-8266	
Cowboy Midstream LLC	(307) 337-1412	(307) 337-1412	www.cowboymidstreamllc.com
CPN Pipeline Company	(877) 432-5555	(707) 374-1505	www.calpine,com
Crestwood Midstream Partners L.P.	(800) 753-5531	(877) 795-7271	www.energytransfer.com
Crooks Municipal Utilities	(605) 359-2371	(605) 543-5238	www.cityofcrooks.net
Dakota Access, LLC - ND	(800) 753-5531	(877) 795-7271	www.energytransfer.com
Dakota Access, LLC - SD	(800) 753-5531	(877) 795-7271	www.energytransfer.com
Dakota Gasification Company	(866) 747-3546	(701) 880-1129	www.dakotagas.com
Dakota Natural Gas LLC	(888) 933-9743	(507) 209-2100	www.dakotanaturalgas.com
Denbury Onshore, LLC	(888) 651-7647	(972) 673-2000	www.denbury.com
Divide Creek Gathering LLC	(844) 663-0191	(281) 664-6839	www.sginterests.com
E&B Natural Resources - Kern	(661) 392-7575	(661) 387-8500	www.ebresources.com
E&B Natural Resources - LA - HBOC	(310) 286-9114	(661) 387-8500	www.ebresources.com
E&B Natural Resources - LA - Murphy	(800) 926-6370	(661) 387-8500	www.ebresources.com
E&B Natural Resources - LA - Packard	(424) 702-1017	(661) 387-8500	www.ebresources.com
E&B Natural Resources - LA - San Vicente	(424) 702-1018	(661) 387-8500	www.ebresources.com
El Paso Natural Gas - CO and NM	(800) 334-8047	(713) 420-5433	www.kindermorgan.com
Elk Hills Power, LLC	(661) 763-6911	(661) 763-6363	www.crc.com

SCAN ME

For more information on states of operation, scan the QR code.

• If you would like any additional information from a pipeline member, call or visit the links above.

PIPELINE OPERATOR CONTACT DIRECTORY

Company	EMERGENCY	NON-EMERGENCY	WEB ADDRESS
Enable Bakken Crude Services	(800) 753-5531	(877) 795-7271	www.energytransfer.com
Enbridge - Express Pipeline	(800) 794-3827	(800) 700-8666	www.enbridge.com
Enbridge Energy	(800) 858-5253	(715) 394-1451	www.enbridgeus.com
Enbridge Gas Colorado	(800) 767-1689	(801) 324-5000	www.enbridgegas.com/
Enbridge Gas Idaho	(800) 767-1689	(801) 324-5000	www.enbridgegas.com/
Enbridge Gas Utah	(800) 767-1689	(801) 324-5000	www.enbridgegas.com/
Enbridge Gas Wyoming	(800) 767-1689	(801) 324-5000	www.enbridgegas.com/
Enbridge Pipelines (North Dakota) LLC	(800) 858-5253	(701) 857-0800	www.enbridge.com
Energy Operations Management Inc	(877) 723-3344	(916) 859-4700	
Energy Operations Management Nevada LLC	(877) 723-3344	(916) 859-4700	
Energy Transfer Crude	(800) 753-5531	(877) 795-7271	www.energytransfer.com
Energy West Montana	(800) 570-5688	(406) 791-7500	www.egas.net
Enterprise - Jonah Gas Gathering	(800) 203-1347	(307) 537-4721	www.enterpriseproducts.com
Enterprise - Mid America Pipeline - CO, UT, WY	(888) 883-6308	(970) 263-3015	www.enterpriseproducts.com
Enterprise Products - CO	(800) 546-3482	(713) 381-2802	www.enterpriseproducts.com
Enterprise Products - Piceance Gas Gathering	(888) 883-6308	(888) 806-8152	www.enterpriseproducts.com
EOG Resources - OK	(800) 225-8314	(405) 246-3100	www.eogresources.com
ExxonMobil Production	(307) 276-6000	(307) 276-6238	www.exxonmobil.com
Fairview System	(888) 489-2747	(346) 249-3200	www.truecos.com
Fountain Valley Power LLC	(303) 594-2655	(303) 922-0630	www.onwardenergy.com
Freeport-McMoRan Oil & Gas	(805) 739-9111	(805) 934-8288	www.fcx.com
Front Range Pipeline, LLC	(800) 421-4122	(406) 628-5443	www.chspipelines.com
Frontier Field Services	(800) 503-5545	(575) 676-3528	www.durangomidstream.com
Garretson Natural Gas	(605) 594-6723	(605) 594-6723	www.garretsonsd.com
Genesis Alkali LLC	(307) 875-8150	(307) 872-2131	www.alkali.tronox.com
Georgia-Pacific - Camas Paper	(360) 834-8414	(360) 834-3021	www.gp.com
Glacial Lakes Energy Aberdeen LLC	(800) 367-6964	(507) 524-4103	http://www.glaciallakesenergy.com/
Granite Creek Energy	(307) 527-2873		http://granitecreekenergy.com
Grayson Mill Energy LLC	(833) 463-6749	(832) 271-8050	www.graysonmillenergy.com
Great Plains Natural Gas Company	(877) 267-4764	(877) 267-4764	www.gpng.com
Green Natural Gas Ventures LLC	(435) 631-2239	(435) 220-0021	
Greylock Energy	(188) 869-8517	(304) 925-6100	http://greylockenergy.com
Grove Municipal Service Authority	(918) 801-5404	(918) 786-6107	www.cityofgrove.com
Harlan Municipal Utilities	(712) 755-5182	(712) 733-0026	www.harlannet.com
Harvest Midstream Company	(713) 289-2921	(713) 209-2400	www.paradigmmidstream.com
Havre Pipeline Company LLC	(406) 357-2233	(406) 357-3643	
Hawaii Electric Light Co.	(808) 969-0413	(808) 969-6999	www.hawaiielectriclight.com
Hawaii Gas	(808) 526-0066	(808) 535-5933	www.hawaiigas.com
Hawaiian Electric Company, Inc	(808) 543-7685	(808) 548-7311	www.hawaiianelectric.com
Hess Corporation	(800) 406-1697	(701) 420-6900	www.hess.com
Hildale - Colorado City Gas Department	(435) 467-1160	(435) 874-1160	
Holly Energy Partners	(877) 748-4464	(214) 954-3998	www.HFSinclair.com
Humboldt Municipal Gas Utility	(888) 320-1490	(605) 661-5268	www.humboldtsd.com
Intermountain Gas Company	(800) 548-3679	(800) 548-3679	www.intgas.com
Island Energy Services	(808) 682-4711	(808) 682-2227	www.islandenergyservices.com
Jayhawk Pipeline	(888) 542-9575	(855) 424-7747	www.chspipelines.com
KB Pipeline	(800) 433-0252	(800) 433-0252	www.portlandgeneral.com
Kern River Gas Transmission Company	(800) 272-4817	(800) 420-7500	www.kernrivergas.com
Kinder Morgan Altamont	(435) 454-3927	(800) 276-9927	www.kindermorgan.com
Kinder Morgan CO2 Company, LP	(877) 390-8640	(325) 573-3105	www.kindermorgan.com
Kinder Morgan Double H Pipeline	(877) 977-2078	(307) 686-8288	www.kindermorgan.com
Koda - Greater Natural Buttes, Unitah	(435) 289-9499	(303) 941-3773	www.kodaresources.com/
Koda - Middle Fork Energy Partners, LP	(800) 915-4539	(303) 941-3773	www.kodaresources.com/
Liberty Utilities	(855) 344-8134	(855) 872-3242	www.libertyutilities.com/
Koda - Greater Natural Buttes, Unitah	(435) 289-9499	(303) 941-3773	www.kodaresources.com/
Koda - Middle Fork Energy Partners, LP	(800) 915-4539	(303) 941-3773	www.kodaresources.com/
Liberty Utilities	(855) 344-8134	(855) 872-3242	www.libertyutilities.com/
Linde Inc	(800) 926-9620	(801) 359-8629	www.linde.com
Lost Creek Gathering Company	(877) 534-4117	(307) 328-2833	
Lumen Midstream Partners - KS	(316) 542-0395	(316) 542-0395	www.durangomidstream.com
Magellan Midstream Partners LP - ND	(800) 720-2417	(701) 282-7134	www.magellanlp.com
Magellan Midstream Partners LP - WY and SD	(800) 720-2417	(918) 574-7000	www.magellanlp.com
Marathon Pipe Line - Northwest Products	(833) 675-1234	(855) 888-8056	www.marathonpipeline.com
Marathon Pipe Line - Salt Lake and Core	(833) 675-1234	(855) 888-8056	www.marathonpipeline.com
Matrix Oil Corporation	(805) 586-0674	(805) 798-3592	www.matrixoil.com
Mid American Energy Company	(800) 595-5325	(888) 427-5632	www.midamericanenergy.com

PIPELINE OPERATOR CONTACT DIRECTORY

Company	EMERGENCY	NON-EMERGENCY	WEB ADDRESS
Midstream Energy Partners	(866) 295-2176	(661) 765-4087	
Midstream Energy Partners (CTC)	(307) 267-4638	(307) 267-4638	http://www.midstreamenergy.us
Midwest Energy Inc.	(800) 222-3121	(800) 222-3121	www.mwenergy.com
MIGC	(307) 682-9710	(970) 515-1901	www.migc.com
Montana Dakota Utilities Company	(800) 638-3278	(800) 638-3278	www.montana-dakota.com
Mountain Gas Resources, Inc.	(307) 870-2859	(307) 212-3461	www.westernmidstream.com
MountainWest Pipeline	(800) 300-2025	(307) 677-5003	www.mwpipe.com/
MPLX - CO and UT	(800) 840-3482	(800) 840-3482	www.marathonpetroleum.com
MPLX - ND and MT	(866) 283-7676	(800) 840-3482	www.marathonpetroleum.com
MPLX - WY	(800) 840-3482	(800) 840-3482	www.marathonpetroleum.com
MPLX - WY NGL	(800) 725-1514	(800) 840-3482	www.marathonpetroleum.com
Nephi City Gas	(435) 623-0822	(435) 623-0822	www.nephi.utah.gov
Nesson Gathering System LLC	(701) 664-3139	(701) 664-3139	www.xtoenergy.com
Nevada Gold Mines	(775) 778-4802	(775) 748-1824	http://www.barrick.com/English/operations/nev
Northern Natural Gas - IA	(888) 367-6671	(888) 689-5175	www.northernnaturalgas.com
Northern Natural Gas - SD	(888) 367-6671	(888) 689-5175	www.northernnaturalgas.com
NorthWestern Energy - MT	(888) 467-2669	(406) 497-2446	www.northwesternenergy.com
NorthWestern Energy - NE and SD	(800) 245-6977	(406) 497-2446	www.northwesternenergy.com
NuStar Logistics, L.P	(800) 481-0038	(361) 290-0604	www.nustarenergy.com
NuStar Pipeline Operating Partnership L.P.	(800) 759-0033	(316) 721-7068	www.nustarenergy.com
NW Natural	(800) 882-3377	(503) 610-7639	www.nwnatural.com
ONEOK Fort Union Gas Gathering	(866) 575-6465	(307) 687-3103	www.oneok.com
ONEOK NGL Pipeline, L.L.C.	(855) 348-7258	(855) 689-1298	www.oneok.com
ONEOK Rockies Midstream	(800) 778-7834	(406) 433-3664	www.oneok.com
ONEOK Rockies Midstream - Wyoming	(866) 575-6465	(307) 687-3103	www.oneok.com
ONEOK Viking Gas Transmission	(888) 417-6275	(218) 745-5082	www.vgt.nborder.com
Overland Pass Pipeline Company	(800) 635-7400	(307) 872-2833	www.williams.com/overlandpass/
Pacific Gas and Electric Company	(800) 743-5000	(800) 743-5000	www.pge.com/pipelinesafety
Par Rocky Mountain Midstream LLC	(888) 550-7766	(406) 439-0805	www.parpacific.com
Pecan Pipeline (Wyoming), LLC	(866) 899-2626	(866) 994-4775	www.pecanpipeline.com
Pecan Pipeline Company - ND	(866) 899-2626	(701) 628-1635	www.pecanpipeline.com
Pembina Cochin Pipeline - ND	(800) 360-4706	(701) 252-9013	www.pembina.com
Petro - Hunt, LLC	(701) 863-6500	(701) 863-6500	www.petrohunt.com
Phillips 66 Pipe Line Company	(877) 267-2290	(406) 441-4749	www.phillips66.com
Pinedale Natural Gas, Inc.	(307) 367-4427	(970) 928-9208	www.pinedalegas.com
Pioneer Pipeline / Phillips 66	(877) 267-2290	(406) 441-4749	www.phillips66.com
Pipeline Technology	(888) 650-4443	(225) 933-2562	http://pipelinetechnology.biz/
Plains Pipeline, L.P.	(800) 708-5071	(713) 993-5098	www.plainsallamerican.com
Platte River Power Authority	(970) 229-1733	(970) 226-4000	www.prpa.org
Prospector Pipeline Company	(877) 723-3344	(916) 859-4700	
Puget Sound Energy	(888) 225-5773	(888) 225-5773	www.pse.com
Red Cedar Gathering Company	(970) 382-0828	(970) 764-6900	www.redcedargathering.com
Ringwood Gathering Company	(800) 967-8493	(580) 438-2345	www.ringwoodgathering.com
Roaring Fork Midstream, LLC	(877) 375-0488	(720) 923-5593	www.roaringforkmidstream.com
Running Horse Pipeline, LLC	(800) 889-7437	(928) 871-4880	www.nnogc.com
San Diego Gas & Electric	(888) 611-7343	(800) 411-7343	www.sdge.com
Savage	(701) 774-9316	(701) 774-9312	www.savageservices.com
Scout Energy Partners - GMBU	(435) 823-4114	(972) 277-1397	http://scoutep.com
Scout Energy Partners - Raven Ridge Pipeline	(888) 839-1960	(972) 277-1397	http://scoutep.com
Sentinel Peak Resources	(661) 324-6571	(661) 809-9451	www.sentinelpeakresources.com
Signature Flight Support	(808) 836-1830	(808) 226-3981	www.signatureflight.com
Silver Creek Midstream Holdings	(866) 628-1693	(469) 614-2257	www.scmidstream.com
SIMCOE LLC	(970) 247-6925	(970) 247-6925	https://simcoe-energy.com/
Sinclair Pipeline Company	(800) 321-3994	(307) 328-3553	www.HFSinclair.com
SoCal Holdings, LLC / LA Basin	(562) 624-3452	(562) 624-3400	www.crc.com
South Dakota Intrastate Pipeline Co.	(800) 852-0949	(605) 224-0949	www.sdipco.com
Southern California Gas Company	(800) 427-2200	(800) 427-2200	www.socalgas.com
Southern Star Central Gas Pipeline	(800) 324-9696	(888) 885-6008	www.southernstar.com
Southwest Gas	(877) 860-6020	(877) 860-6020	www.swgas.com
Spire	(800) 887-4173	(205) 326-2680	www.spireenergy.com
St. Croix Gas	(715) 425-6177	(715) 425-6177	www.stcroixgas.com
Summit Midstream North Dakota	(888) 643-7929	(970) 858-3425	www.summitmidstream.com
Suncor Energy (U.S.A.) Pipeline Company	(866) 978-6267	(307) 775-8106	www.suncor.com
Tallgrass Cheyenne Connector	(877) 436-2253	(303) 763-2950	www.tallgrass.com
Tallgrass East Cheyenne Gas Storage	(877) 436-2253	(303) 763-2950	www.tallgrass.com

PIPELINE OPERATOR CONTACT DIRECTORY

Company	EMERGENCY	NON-EMERGENCY	WEB ADDRESS
Tallgrass Interstate Gas Transmission	(888) 763-3690	(303) 763-2950	www.tallgrass.com
Tallgrass Midstream - Powder River Gathering	(307) 687-9691	(303) 763-2950	www.tallgrass.com
Tallgrass Midstream - Redtail NGL Pipeline	(888) 763-3690	(303) 763-2950	www.tallgrass.com
Tallgrass Midstream - Wind River Gathering	(888) 763-3690	(303) 763-2950	www.tallgrass.com
Tallgrass Pony Express Pipeline	(855) 220-1762	(303) 763-2950	www.tallgrass.com
Tallgrass Powder River Gateway	(855) 220-1762	(303) 763-2950	www.tallgrass.com
Tallgrass Rockies Express Pipeline	(877) 436-2253	(303) 763-2950	www.tallgrass.com
Tallgrass Ruby Pipeline	(877) 436-2253	(303) 763-2950	www.tallgrass.com
Tallgrass Trailblazer Pipeline	(877) 335-3680	(303) 763-2950	www.tallgrass.com
Targa Badlands LLC	(866) 957-3133	(701) 842-3315	www.targaresources.com
TC Energy - Bison Pipeline	(800) 447-8066	(855) 458-6715	https://www.tcenergy.com/sustainability/safety
TC Energy - Columbia Gas Transmission	(800) 447-8066	(855) 458-6715	https://www.tcenergy.com/sustainability/safety
TC Energy - Gas Transmission Northwest	(800) 447-8066	(855) 458-6715	https://www.tcenergy.com/sustainability/safety
TC Energy - Northern Border Pipeline Co	(800) 447-8066	(855) 458-6715	https://www.tcenergy.com/sustainability/safety
TC Energy - Tuscarora Gas Transmission	(800) 447-8066	(855) 458-6715	https://www.tcenergy.com/sustainability/safety
THUMS Long Beach Company	(562) 624-3452	(562) 624-3400	www.crc.com
Thunder Basin Pipeline LLC	(877) 478-7588	(850) 324-5453	www.slateenergy.com
Tidelands Oil Production Company	(562) 624-3452	(562) 624-3400	www.crc.com
Timberland Gathering & Processing Inc.	(620) 624-3868	(620) 624-3868	www.timberlandgathering.com
Town of Aguilar	(719) 941-4360	(719) 941-4360	www.aguilarco.us
Town of Ignacio	(970) 759-3660	(970) 563-9494	http://townofignacio.colorado.gov
TransColorado Gas Transmission Co.	(800) 944-4817	(800) 276-9927	www.kindermorgan.com/public_awareness
UNEV Pipeline LLC	(877) 748-4464	(307) 328-3553	www.HFSinclair.com
United States Gypsum Company	(866) 650-6005	(503) 556-4360	www.usg.com
Urban Oil & Gas	(435) 820-9801	(435) 636-2400	www.urbanoilandgas.com
Utah Associated Municipal Power Systems	(801) 925-4008	(801) 925-4012	www.uamps.com
Utah Gas Corp	(970) 675-4482	(970) 675-4400	www.utahgascorp.com
Vantage Pipeline US LP	(800) 360-4706	(888) 428-3222	www.pembina.com
Vermont Gas Systems	(800) 639-8081	(802) 863-4511	www.vermontgas.com
Walden Gas	(970) 723-4662	(970) 928-9208	www.pinedalegas.com
Wamsutter Pipeline LLC	(307) 870-2859	(307) 212-3461	www.westernmidstream.com
Watertown Municipal Utilities	(605) 882-6233	(605) 882-6233	www.watertownsd.us
WBI Energy	(888) 859-7291	(406) 359-7316	www.wbienergy.com
Western Midstream - Utah	(435) 781-7039	(435) 781-9733	www.westernmidstream.com
Western Midstream - Wyoming	(307) 682-9710	(307) 696-4747	www.westernmidstream.com
Westfield Gas & Electric	(413) 572-0000	(413) 572-0100	www.wgeld.org
Williams Midstream - Northwest CO	(800) 635-7400	(970) 285-5512	www.williams.com
Williams Midstream - Wyoming	(800) 635-7400	(307) 872-2839	www.williams.com
Williams NW Pipeline - Eastern WA Dist.	(800) 972-7733	(509) 466-6650	www.williams.com
Williams NW Pipeline - Intermountain Dist.	(800) 972-7733	(208) 884-4300	www.williams.com
Williams NW Pipeline - Portland Dist.	(800) 972-7733	(770) 507-4203	www.williams.com
Williams NW Pipeline - Seattle Dist.	(800) 972-7733	(425) 836-4950	www.williams.com
Williams NW Pipeline - Uinta Dist.	(800) 972-7733	(435) 781-3200	www.williams.com
Williams Rocky Mountain Midstream	(877) 624-7183	(918) 573-7409	www.williams.com
Wyoming Gas Company	(307) 347-2416	(307) 335-3597	www.wyogas.com
Wyoming Pipeline Company LLC	(888) 550-7766	(307) 629-4432	http://www.parpacific.com
Xcel Energy, NSP - Minnesota	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, NSP - Wisconsin	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, PSCo - Gas Distribution	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, PSCo - Gas Transmission	(800) 698-7811	(800) 895-4999	www.xcelenergy.com
Xcel Energy, SPS	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
XTO Energy - New Mexico	(575) 887-7329	(885) 218-2705	www.xtoenergy.com
XTO Energy - Oklahoma	(918) 423-0366	(580) 653-3200	www.xtoenergy.com
XTO Energy - West TX	(877) 311-1007	(806) 592-2939	www.xtoenergy.com
XTO Energy - West TX	(877) 311-1007	(806) 592-2939	www.xtoenergy.com
Wyoming Gas Company	(307) 347-2416	(307) 335-3597	www.wyogas.com
Wyoming Pipeline Company LLC	(888) 550-7766	(307) 629-4432	http://www.parpacific.com
Xcel Energy, NSP - Minnesota	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, NSP - Wisconsin	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, PSCo - Gas Distribution	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
Xcel Energy, PSCo - Gas Transmission	(800) 698-7811	(800) 895-4999	www.xcelenergy.com
Xcel Energy, SPS	(800) 895-2999	(800) 895-4999	www.xcelenergy.com
XTO Energy - New Mexico	(575) 887-7329	(885) 218-2705	www.xtoenergy.com
XTO Energy - Oklahoma	(918) 423-0366	(580) 653-3200	www.xtoenergy.com
XTO Energy - West TX	(877) 311-1007	(806) 592-2939	www.xtoenergy.com

Resources for Excavators

Visit our website for additional training tools and resources!
pipelineawareness.org/excavator-resources

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CGA Best Practices

The CGA Best Practices Guide is the original industry resource for ensuring the safety of those who work or live near underground facilities.

49 CFR Part 196 - Protection of Underground Pipelines from Excavation Activity

This Federal Regulation prescribes the minimum requirements that excavators must follow to protect underground pipelines from excavation-related damage. It also establishes an enforcement process for violations of these requirements.

Download a FREE Step-by-Step Excavation Safety Checklist

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Free Online Training

Access FREE training from our One Call center partners.

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How useful, to you, is the content contained in this edition?

☐ *Extremely* ☐ *Very* ☐ *Somewhat* ☐ *Not at all*

Additional topics I'd like to see included in the Excavation Safety Guide are:

_____

INFORMATION REQUEST FORM

Please complete the form below to request additional information from Pipeline Companies. Your request will be forwarded to all Pipeline Member Companies operating facilities in your State/County. Please print the information clearly in each field. All fields must be completed to process information requests.

Organization Name: _____ State & County: _____

Contact Person: _____ Contact Email: _____

Contact Phone: _____

Request: _____

_____

After completing this form, scan or snap a pic and email to *pipeline.association@pipelineawareness.info*
This form may also be accessed online at https://pipelineawareness.org/request-info
or by scanning the QR code on this page.

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Pipeline Association for Public Awareness
8601 W Cross Dr PWB 302 Unit F5
Littleton, CO 80123-2200

Pre-Excavation Checklist

PAPA's Pre-Excavation Checklist can be used to guide safe work practices. Download, print, and distribute to your work crews! Available in English and Spanish.