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September 30, 2020

Oregon Public Utility Commission
Filing Center
201 High St SE, Suite 100
P.O. Box 1088
Salem, OR 97308-1088

Re: UM 1899(3), Cascade Natural Gas Corporation's System Safety Plan

Cascade Natural Gas Corporation (Cascade or Company) submits its annual System Safety Plan in compliance with Commission Order No. 17-084, entered March 6, 2017. The Order requires natural gas companies to submit an annual "Safety Project Plan" (Plan) report to the Commission by September 30th of each year. The Order lays out the requirements of the Plan, which is to be provided to the Commission as an informational report only. The Company's attached report satisfies these requirements, demonstrates Cascade's priority commitment to natural gas safety, and meets the objective of being informational and easy to understand for the public, our customers, and other regulatory stakeholders.

Please contact me at (509)734-4599 if you have any questions.

Sincerely,

/s/ Ryan Privratsky

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**Cascade Natural Gas Corporation
2021 Annual Oregon
System Safety Plan**

OPUC Commission Order No. 17-084

September 2020

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APPENDIX A - Public Awareness Information

I. Overview of Cascade Natural Gas Corporation

Until the early 1950s, Pacific Northwest communities outside the larger metropolitan areas were passed over for natural gas service. In 1953, Pacific Northwest businessmen Lester Pettit, Spencer Clark, and Stewart Matthews formed Cascade Natural Gas Corporation (Cascade) to serve these communities with clean, affordable natural gas.

In those early days, the founders faced many financial, engineering and operational challenges as they strived to expand service and enhance their operations. Cascade grew steadily to become one of the fastest growing natural gas utilities in the nation.

Today, Cascade is a regulated utility offering natural gas service in the states of Oregon and Washington. Cascade has approximately 294,000 total customers in 96 communities – 68 of which are in Washington and 28 in Oregon. Cascade's service areas are concentrated in western and central Washington, and central and eastern Oregon. Cascade owns and operates 34.9 miles of transmission pipeline, 1,650 miles of distribution pipeline, and 75,600 services in Oregon. Interstate pipelines transmit Cascade's natural gas from production areas in the Rocky Mountains and western Canada. Customers in Oregon are served from Cascade's Southern region which includes Bend and surrounding communities, Ontario, Baker City and the Pendleton/Hermiston areas.



Communities Served in Oregon

Athena	Gilchrist	Milton-Freewater	Prineville
Baker City	Hermiston	Mission	Redmond
Bend	Huntington	Nyssa	Stanfield
Boardman	Irrigon	Ontario	Sunriver
Chemult	La Pine	Pendleton	Umatilla
Crescent	Madras	Pilot Rock	Vale
Echo	Metolius	Powell Butte	Weston

Cascade's headquarters is located in Kennewick, Washington.

II. System Safety Plan Overview

This System Safety Plan (Plan) conforms to the requirements established in Order No. 17-084 (Order), issued in Docket No. UM 1722, the Commission's Investigation into the Recovery of Safety costs by Natural Gas Utilities. The Order requires local distribution companies (LDCs) to file a system safety plan each year which provides the following:

- An explanation of the Company's commitment to and prioritization of safety planning;
- An explanation of the technical reports provided to the Commission's Safety Staff;
- An explanation of the perceived risks addressed by the Company's safety initiatives;
- A brief narrative of each safety program for the 12-month planning period, including:
 - Supporting analysis underlying the safety initiatives;
 - A discussion of the cost-benefit analysis supporting Company decisions; and
 - A narrative on alternatives safety initiatives that the Company considered;
- The expected level of capital and Operations and Maintenance (O&M) expenses required to mitigate issues identified by risk analysis or to meet newly implemented federal code;
- An update on regulatory and legislative changes; and
- A list of any program changes from the prior reporting year.¹

This Plan provides the required information, as listed above, for the 12-month timeframe of January 1, 2021, through December 31, 2021 (2021).

III. Cascade's Commitment to and Prioritization of Safety Planning

Cascade is committed to providing its customers with safe and reliable gas service. To accomplish this, Cascade is continuously engaged in initiatives aimed at maintaining the integrity of Cascade's pipeline system. The list below highlights Cascade's significant pipeline safety functions:

- System Integrity Department responsible for Cascade's Distribution Integrity Management Plan (DIMP) and its Transmission Integrity Management Plan (TIMP), which are discussed in more detail in Section VI of this Plan. The System Integrity team is also tasked with assessing risks to Cascade's pipeline system and creating plans to mitigate these risks.
- Public Awareness & Damage Prevention (PA/DP) Department responsible for Cascade's Public Awareness and Damage Prevention programs, which are discussed in more detail in Section VI of this Plan. The PA/DP Department leads Cascade's efforts in promoting safety information, reducing damages and educating customers, public, and contractors about natural gas and excavation safety.

¹ Commission Order No. 17-084, Appendix A, pages 4-5, ¶ 20 and ¶ 22

- Policy & Procedure Department and a Management of Change (MOC) process used to propose, change, approve, and notify all affected personnel of procedural and technical changes, and to deliver and track training to affected personnel.
- Cascade's Safety and Technical Training Department performs many safety-related responsibilities focused on keeping Cascade employees and the public safe. In compliance with 49 CFR 192 Subpart N, this department is tasked with training and certifying that a Cascade employee is qualified to work on a pipeline. An employee may not perform work on Cascade's pipeline without the proper training.
- Development of a corporate wide Safety Management System (SMS). The SMS is modeled from the pipeline industry recommended practice of API RP 1173. Within the 1173 SMS framework there are 10 essential program elements that the organization is required to establish and maintain. The SMS is based on the Plan-Do-Check-Adjust continuous improvement framework and includes these elements. The goal of our SMS is to identify and reduce operational risks for the organization, while promoting a culture of continuous improvement.
- Quality Control (QC) Department which performs quality reviews and inspections to verify conformance to established company standards. The QC programs include Quality Systems & Reporting, Records & Reviews, and Inspections.

IV. Technical Reports Filed Annually with the Commission's Safety Staff

In 2020, Cascade filed the following technical reports with the Commission's Safety Staff:

- An O&M Manual was filed in April 2020 and again on August 2020 by request. The O&M Manual is filed annually in compliance with 49 CFR 192.605. This manual provides procedures for all O&M tasks that Cascade performs on its facilities.
- Cascade provided the Commission with an updated TIMP in September 2020.
- Cascade provided the Commission with an updated DIMP in September 2020.
- 2019 PHMSA Gas Distribution System Annual Report
- 2019 PHMSA Gas Transmission and Gathering Systems Annual Report

In a typical year, Cascade also responds to the Commission's data requests and to findings in Commission audits.

V. Risks to Cascade's Distribution System

By using Cascade's Distribution Integrity Management Plan (DIMP) risk model, which is described in more detail in Section VII, Cascade has identified the following top four threats to its distribution pipeline system:

1. Excavation Damage

Excavation Damage is the largest, system-wide threat to Cascade's system. Excavation Damage is the breaking, cutting, or other destruction of pipeline facilities caused by earth moving or other equipment, tools, or vehicles. All buried facilities in Cascade's distribution system are in danger of being damaged by excavation activities.

Consideration is given to piping within protective casings, inside underground structures such as basins or vaults which may be shielded or protected from excavation damage. The most significant root cause factors for Excavation Damage are listed below:

- An excavator uses insufficient excavation practices.
- The excavator does not comply with Oregon law that requires anyone planning to break, move, or displace soil to contact Oregon Utility Notification Center (OUNC) to request that all underground utilities be identified before breaking soil.²
- Underground utilities in the excavation site are not properly located and marked because the OUNC representatives were unable to find the excavation area;
- The OUNC is unable to properly locate underground utilities because the excavator failed to properly identify the excavation area; and
- Records of underground utilities are incorrect and, therefore, underground facilities are not properly located prior to excavation.

2. Weld/Joint Failure

Weld/Joint failure is the second largest, system-wide threat to Cascade's distribution system. Weld/Joint failure risk is identified when it is known or anticipated that potential defects in pipe, fittings, components and joints may be present due to manufacturing processes and welding standards for the pipe vintage. Below are the descriptions of major factors that contribute to Cascade's Weld/Joint risk:

- **Weld Standards:** Risk is assigned to steel pipe installed prior to 1980 due to 49 CFR Part 192 requirements for operators in weld standards and welder qualifications that were federally mandated in 1970. By 1980 Cascade had significantly increased weld standards and welder qualifications to meet 49 CFR Part 192 requirements.
- **2" 1960's Vintage Gas Welds:** In 2018 Cascade completed a weld investigation on 1960's vintage 2" steel gas butt welds and found a high percentage of visual inspection failures and destructive testing failures causing concern for weld integrity for size and vintage.
- **External Stresses on Vintage Welds:** External stresses on vintage welds is an interactive threat on vintage steel (defined as pre-1980 and or an unknown install date) main and service welds susceptible to landslide and or frost heave external stresses. Frost heave and landslide soil movement longitudinal external stresses and displacement strain might be readily tolerated by some materials or piping in sound condition, while low ductility materials or pipe joints made by vintage techniques may remain reliable absent certain external stresses, however, when these circumstances exist simultaneously the likelihood of failure in the pipeline is significantly greater due to interacting threats.

² See OAR 952-001-0001 through OAR 952-001-0100.

3. Missing Values

Missing Values is the third largest, system-wide threat to Cascade's system. Missing Values refers to unavailable data points, such as pipe installation date, material type, leak cause, and other values that are necessary to identify threats on the system through use of Cascade's risk model.

4. Corrosion

Corrosion is the fourth largest, system-wide threat to Cascade's distribution system. Corrosion is the result of electrochemical reactions between metals and substances in the environment. All metallic pipe and affixed components are subject to the threat of external corrosion. Internal corrosion is a threat when liquid water has infiltrated the pipe. Cascade does not transport corrosive gas in its distribution system; and, therefore, internal corrosion is unlikely. Atmospheric corrosion is a subset of external corrosion that will occur only on pipe and components that are not buried. Below are the descriptions of major factors that currently contribute to Cascade's Corrosion risk in Oregon:

- **Material Age:** Cathodic protection was mandated federally in 1960 and all of Cascade's distribution systems were fully protected by 1978. Pipe installed prior 1978 is at a higher risk of operating with no or inadequate cathodic protection.
- **Atmospheric Corrosion:** Aboveground pipe is susceptible to the threat of atmospheric corrosion in areas where environmental conditions result in increased likelihoods for atmospheric corrosion to occur. Some of these factors include proximity to salt water bodies of water, areas with high annual rainfall, bridge crossing, and facilities in vaults.
- **Cathodic Protection Treats:** Various threats exist that impact Cascade's cathodic protection systems from providing adequate cathodic protection. These threats can result in a higher external corrosion threat. Some of these threats include: steel pipe in arid climates (annual rainfall ≤ 15 inches/year), cathodic protection shielding, steel pipe casings, and electrically shorted casings.

Additional threats to the distribution system include material, MAOP documentation, natural forces such as landslides, lightning, or earthquakes; other outside forces such as fires, vandalism or vehicular damage; equipment failure such as the malfunction of a control valve or regulator; and incorrect operation, which refers to human error when performing a task.

VI. Early Vintage Steel Pipe (EVSP)

Cascade has identified an increased risk of failure on different subset of early vintage steel pipe (EVSP). EVSP is steel mains, service lines, and associated fittings installed earlier than 1/1/1970. These pipeline segments present an increased risk of failure due to age and obsolete materials, parts and/or equipment.

The primary risks on EVSP include external corrosion, material, weld, or joint failure, equipment failure, MAOP documentation, and missing data. External corrosion on EVSP is attributed to bare, disbonded, damaged or poorly performing pipe coatings, poor soil and

backfill conditions, ineffective cathodic protection, and other factors. Material, weld, or joint failure on EVSP is typically associated with issues with pipe welds made during installation (lack of weld standards and welder qualification), vintage acetylene gas welds, or pipe and fitting material leaks. Equipment failures on EVSP are normally contributed to leaks at main to service connections where O-rings have failed, mechanical couplings and fittings, and on other aging equipment installed when the pipe was originally installed. EVSP also has increased risk associated with pipe with unknown attributes or missing data, which includes unknown physical infrastructure (i.e. pipe material, pipe specifications, construction information), historical information (i.e. corrosion control records, maintenance records, leak records), and sufficient information to establish MAOP.

Ongoing analysis of EVSP continues to show this pipe has a greater likelihood to leak, have corrosion, and/or substandard pipe conditions. These segments of main and their associated service piping have an elevated risk of failure as validated by DIMP and TIMP risk analysis. The different subsets of EVSP include:

1. Pre-CNG Pipe

Cascade operates pipeline segments that are classified as Pre-CNG pipe segments. Pre-CNG pipe segments are distribution systems that were constructed to distribute manufactured gas or natural gas. These pipelines were originally installed, owned, operated, and maintained by others prior to 1955. Cascade acquired many of these systems in the late 1950s and throughout the 1960s. The pipe coating typically found on Pre-CNG pipe is typically bare steel or coal tar wrapped. This pipe is of concern since it is over 60 years old and operated with no or inadequate cathodic protection until the early 1970s, leaving the pipe suspect to elevated corrosion risk. Pre-CNG pipe also has elevated risks associated with missing data with not fully knowing the physical infrastructure and historical information of the Pre-CNG pipe. The extent of this pipe varies throughout Cascade's and depends on the history of the system and how it was acquired by Cascade. The total miles of Pre-CNG in Oregon is shown in the table below.

Total Miles of Pre-CNG Distribution Main	40.04
Total Miles of Pre-CNG Transmission Main	0

2. FISH

Cascade operates pipeline segments that are classified as FISH pipe segments. FISH pipe segments are distribution systems that were installed by Fish Service & Management Corporation in the 1950's through the early 1960's. FISH pipe is normally coal tar wrapped. FISH pipe is of concern since it is around 60 years old and may have operated with no or inadequate cathodic protection until the early 1970s, leaving the pipe suspect to elevated corrosion risk. FISH pipe also tends to have an elevated likelihood to have leaks associated with material and welds. The extent of this pipe varies throughout Cascade's system and depends on the history of the system and how Cascade built out the system in the late 1950's and early 1960's. The total miles of FISH in Oregon is shown in the table below.

Total Miles of FISH Distribution Main	21.97
Total Miles of FISH Transmission Main	0

3. Pre-1970

Cascade operates pipeline segments installed earlier than 1/1/1970 that are not classified as either Pre-CNG or FISH. These pipeline segments were originally installed by either Cascade employees or other contractors hired by Cascade. These pipeline segments are typically coal tar wrapped. This pipe is of concern due to its overall age and cathodic protection history since it may have had no or inadequate cathodic protection until the early 1970s, leaving the pipe suspect to corrosion risk. This pipe also has an elevated weld failure risk associated with leaks on vintage metal arc welds and acetylene gas welds. The total miles of Pre-1970 in Oregon is shown in the table below.

Total Miles of Pre-1970 Distribution Main	316.05*
Total Miles of Pre-1970 Transmission Main	4.4

* Includes 54.49 miles with missing or unknown install date, excludes PE main

VII. Cascade's 2021 Safety Initiatives

To address the threats to Cascade's distribution system, Cascade engages in several safety initiatives. Cascade's safety activities can generally be separated into the following three categories:

1. Prescriptive Regulatory Initiatives – This refers to actions Cascade takes to comply with specific federal and state minimum safety standards.
2. Proactive, Performance-Based Actions – This refers to actions Cascade takes to comply with subjective rather than prescriptive federal and state minimum safety standards. Such standards require Cascade to develop and perform risk-based analytics, and to implement a plan for responding to identified risks.
3. Additional Prudent, Risk-Reduction Actions – This refers to Cascade's programs or activities that go above compliance to minimum safety standards and are engaged in to improve the public's safety.

Each safety activity category is described in further detail below:

1. Prescriptive Regulatory Actions

The most comprehensive regulations governing Cascade's distribution system is the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Code of Federal Regulations (CFR), Title 49, Parts 190-199. 49 CFR Part 192 includes multiple and broad prescriptive requirements related to the transportation of natural gas. These regulations require transporters of gas to inspect pipelines at regular intervals to confirm that the pipeline is meeting the operational requirements established in federal code. Compliance to these regulations provides Cascade with the baseline data for the proactive, performance-based actions. Prescriptive regulations are straight-forward guidelines on

how to operate and maintain a pipeline. Compliance to prescriptive regulations does not require risk or cost-based analysis.

The prescriptive regulatory compliance work that Cascade will be performing in 2021 includes performing atmospheric corrosion surveys; monitoring cathodic protection performance; performing leak surveys; patrolling the system, performing preventative maintenance on control valves; odorizing natural gas received into Cascade's system, and performing general system maintenance. Since this work is required, Cascade did not perform cost benefit analyses to determine if the work should be done, and alternatives to this work were not considered.

2. Proactive, Performance Based Actions

While certain sections of 49 CFR 192 tell the utility exactly what to do, compliance to other parts of 49 CFR 192 is more subjective. For instance, certain sections of 49 CFR 192 tell gas pipeline operators to identify existing and potential threats, evaluate and rank the risks, and implement measures to mitigate the highest risks. In response to the more subjective PHMSA regulations found in 49 CFR 192, Cascade has developed programs focused on activities to mitigate pipeline safety risk. These programs include integrity management, public awareness, and damage prevention programs.

a. Integrity Management

Transmission Integrity Management Program (TIMP)

PHMSA rules required Cascade to create and implement a TIMP by December 17, 2004. The purpose of TIMP is to identify, prioritize, assess, evaluate, repair, and validate the integrity of transmission pipelines that could, in the event of a leak or failure, affect High Consequence Areas (HCAs). The threats that are identified and evaluated in TIMP include:

- Corrosion (External, Internal, Stress Corrosion Cracking)
- Material
- Construction
- Equipment
- Excavation Damage
- Incorrect Operations
- Vandalism
- Weather and Outside Forces
- Cyclical Fatigue

Transmission integrity requirements are outlined in 49 CFR 192 Subpart O - Gas Transmission Pipeline Integrity Management. Cascade's TIMP Plan describes company specific risks and steps in greater detail.

TIMP activities include baseline assessments and reassessments of transmission lines using pressure testing, inline inspection, and other direct assessment methods. They also include pipeline replacements, relocations, and modifications in compliance with integrity management rules, and to mitigate identified threats.

Distribution Integrity Management Program (DIMP)

The requirement for Cascade to have a DIMP became effective on February 12, 2010. Operators were given until August 2, 2011, to write and implement a DIMP that demonstrates an understanding of the distribution system design and material characteristics; describes the operating conditions and environment; provides the maintenance and operating history; identifies existing and potential threats; evaluates and rank risks; identifies and implements measures to address risks; measures program performance; monitors results; evaluates effectiveness; and periodically assesses and improves the plan. The threats that are identified and evaluated in DIMP include:

- Corrosion
- Natural Forces
- Excavation Damage
- Other Outside Force Damage
- Material, Weld, or Joint Failure
- Equipment Failure
- Incorrect Operation
- Missing Data
- Other – Forces unique to a specific area on the system

Distribution Integrity requirements are outlined in 49 CFR 192 Subpart P - Gas Distribution Pipeline Integrity Management and Cascade's DIMP Plan describes company specific risks and steps in greater detail.

DIMP activities include risk-based projects warranting Accelerated Action (AA) to address system integrity risks. These AA's are made up of projects that have been identified through risk modeling, industry identified threats, and by Subject Matter Experts (SME's) within Cascade.

Analysis and Quantification

As part of Cascade's DIMP and TIMP Plans, a risk analysis has been created and is maintained. Information collected as part of DIMP and TIMP are inputted into the risk analysis, where it is analyzed to find areas of elevated risk and trends. This allows Cascade to quantify the risk associated with each pipeline segment based on factors that are pertinent to the integrity of the system.

Identification of Risk Management Actions

DIMP and TIMP risk analysis results and SME input are used to identify and prioritize risk management actions to address the threats and associated risk to Cascade's distribution systems. Risk management is accomplished by taking actions to reduce the likelihood of an occurrence, by alleviating the consequences of an occurrence or both. Appropriate actions are dependent on the group being addressed, the associated threat, whether the threat is current or potential in the future and the viability of the action in managing the relevant risk factors. Possible risk management actions include:

- Replacement of pipe, facilities, components, equipment
- GIS entry/data clean up
- Damage Prevention
- Public Awareness
- Leak Management
- Maintenance Programs
- Operator Qualification Program

Obtaining New Information

Cascade obtains new information for DIMP and TIMP through the following methods:

1. Observing trending – DIMP and TIMP are analyzed on a yearly basis. The analysis includes reviewing leak information, failure analysis, and system condition data to identify trends. The analysis provides insight into the risks associated with pipe segments and facilities identified as having an elevated risk of failure.
2. New information is gathered through normal activities. Gathering new information from forms or other methods used to collect information related to the physical attributes and/or operating and maintenance activities. Integrating newly collected information into DIMP and TIMP.
3. SME panel meetings – SME panel meetings are held on an appropriate basis. Information from the panel meetings are used to validate the DIMP and TIMP risk analysis and new information is inputted into the DIMP and TIMP risk analysis.
4. Updating risk analysis – Cascade's DIMP and TIMP risk analysis is updated annually. Results of the risk analysis are used to prioritize risk management actions.
5. Continuous improvement – The assessment, prioritization, and mitigation of system risks continue to be refined as new and additional risk knowledge is incorporated into DIMP and TIMP through normal O&M and DIMP and TIMP activities. Activities related to DIMP and TIMP could include gathering data,

conducting targeted inspections and assessments, and completing remediation and replacement work associated with integrity management driven programs.

Based on new information that is obtained, the integrity management activities may be modified appropriately to further accelerate or decelerate necessary risk management actions. Additionally, Cascade is actively monitoring system threats and performance and may identify additional pipeline segments and facilities that have an elevated risk of failure.

2021 Planned Integrity Management Activities

DIMP

In 2021, Cascade will continue to evaluate existing and new threats to its distribution system. In addition, Cascade will continue to complete required routine program requirements as outline in the DIMP plan and continue ongoing risk management actions. Cascade is also in the process of integrating its DIMP plan and risk model with the other MDUG companies to align key program elements across the corporation. Any significant changes will be outlined in future updates.

TIMP

In 2021, Cascade will continue to evaluate existing and new threats to its transmission system. No integrity baseline or reassessments are scheduled to be completed in 2021. In addition, Cascade will continue to complete required routine program requirements as outline in the TIMP plan. Cascade is also continuing to integrate its TIMP plan with the other MDUG companies to align key program elements across the corporation. A finalized integrated TIMP plan is scheduled to be completed during the first quarter of 2021. Any significant changes will be outlined in future updates.

b. Public Awareness and Damage Prevention

Public Awareness

In compliance with API RP 1162, Cascade's Public Awareness Program promotes, actively manages, and enhances the public's knowledge of pipeline safety, emergency responsiveness, and damage prevention. Listed below are the goals of Cascade's Public Awareness campaign:

- Increase the awareness of the identified stakeholder audiences to the presence of pipelines in their community and the role those pipelines play in transporting energy.
- Educate stakeholders that pipelines are a proven safe mode of natural gas transportation.
- Increase stakeholders' knowledge of the measures Cascade takes to prevent pipeline accidents.

- Improve stakeholders' understanding of the role they can play in helping to prevent pipeline accidents caused by third party damage and right-of-way encroachment.
- Develop programs that can be managed, implemented, and evaluated for continual improvement.

Damage Prevention

Cascade's Damage Prevention Program and Public Awareness activities play a vital role in preventing damage caused to Cascade's facilities by third party excavators—the highest threat to Cascade's distribution system. Cascade is fighting this threat by engaging other natural gas companies in a comprehensive public communication campaign known as the 811 or Call Before You Dig program. Cascade communicates, cooperates, and coordinates with government agencies, utilities, contractors, engineers, customers, and the general public through membership in the 811 one-call centers and through other communications, education, and awareness initiatives. The Damage Prevention Program seeks to achieve the following:

- Ensure the protection of the pipeline in each operating district through participation in a qualified One-Call Notification system.
- Locate and mark Cascade-owned or operated facilities per Company Procedures to prevent damage to buried facilities during excavation
- Maintain a means for informing potential excavators of the existence and purpose of the Cascade Damage Prevention Program.
- Inspect and examine pipelines that Cascade suspects may have been damaged by excavation activities.
- Report excavation damage in the appropriate reporting tools.
- Notify excavators of their responsibilities after an excavation damage event.
- Attend and actively participate in local utility coordinating councils in each district's service area.

Figures 1, 2, and 3 below show Cascade's trend with pipeline damages, number of locate request, and damages per 1,000 locates in Oregon for 2017 - 2019.

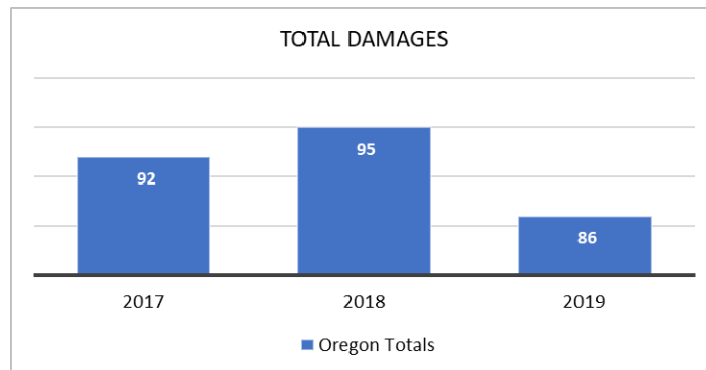


Figure 1: Total Damages

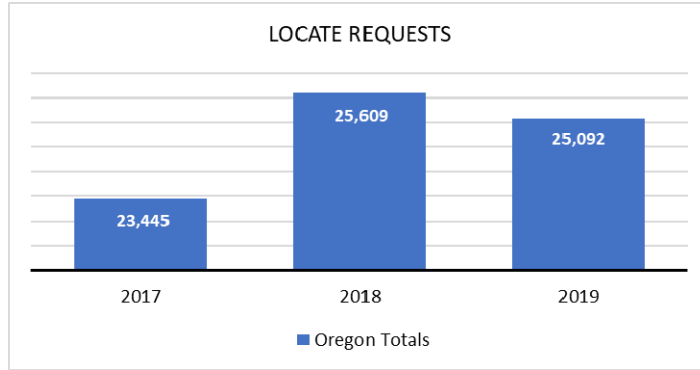


Figure 2: Locate Requests

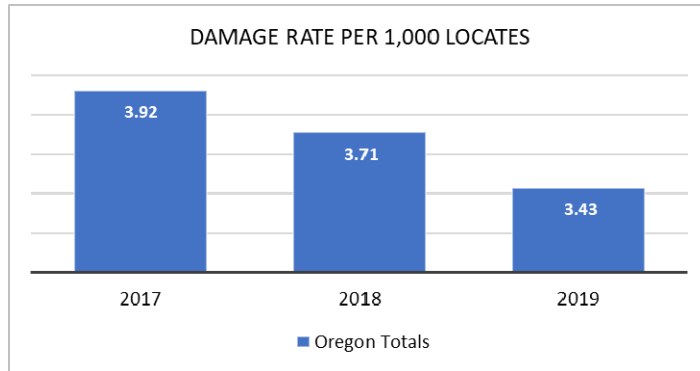


Figure 3: Damage Rate Per 1,000 Locates

Figures 4 and 5 show the 2019 annual damages by excavation cause category and excavator type.

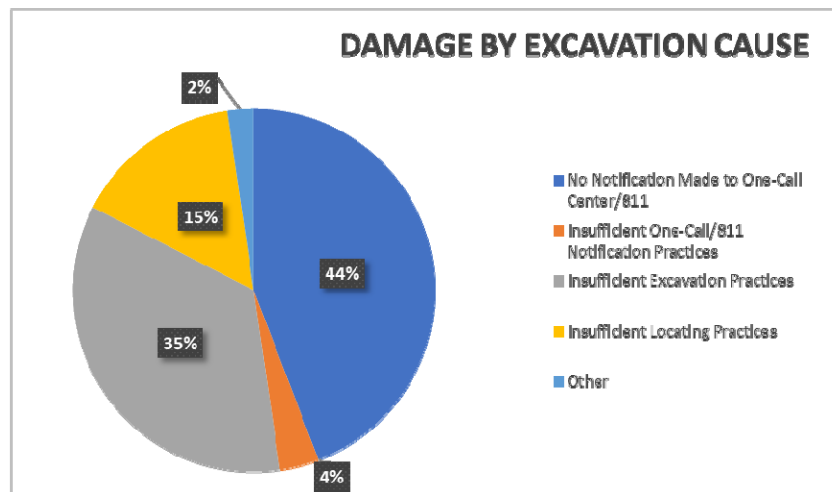


Figure 4: Damage by Excavation Cause

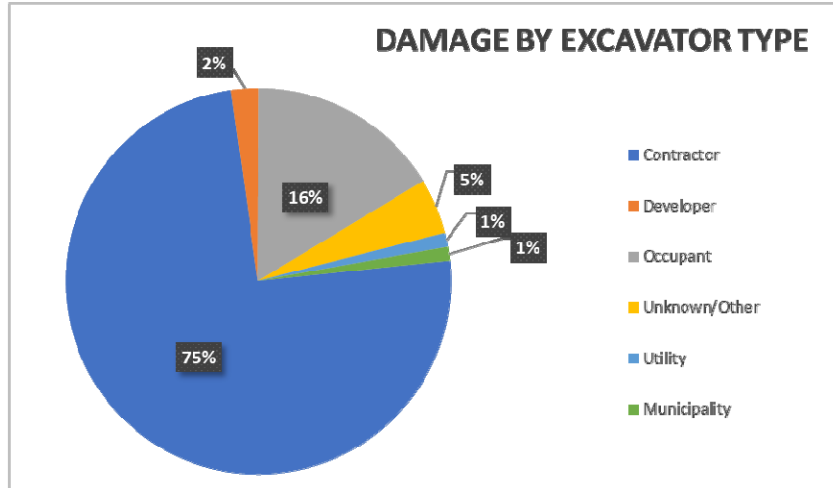


Figure 5: Damage by Excavator Type

2021 Planned Public Awareness and Damage Prevention Activities

Cascade's Public Awareness and Damage Prevention activities are similar from year to year. Cascade's involvement at community events varies each year as events scheduled change. Planned 2021 expenses for Public Awareness and Damage Prevention in Oregon include the following activities.

- Sending customers bill stuffers each month that feature a Public Awareness message. Examples of Cascade's mailers are included in Appendix A.
- Running at least one thirty second television commercial, radio advertisement, or online advertisement.
- Sending a direct mailer on pipeline safety to a targeted audience – customers located near transmission pipelines.
- Proving safety-related advertisements, staffing booths at community events, giving out promotional giveaways, and sponsoring local trainings. Some examples of outreach Cascade participated in for 2020 are listed below:
 - Excavation Safety Email Blast to Deschutes County Excavators
 - Sponsored the La Pine County Fair and provided 811 ads
 - 811 advertisement in the High School sporting event programs
 - Sponsored an Emergency Responder Training in Baker County
 - Sponsored an Emergency Responder Training in Umatilla County
 - Sponsored an Emergency Responder Training in Deschutes County
 - Cascade helped develop and fund Construction Contractors Board (CCB) Online Excavator Training in both English and Spanish

Current proposed changes to the Public Awareness and Damage Prevention programs for 2021 include:

- Filing complaints against professional excavators/contractors that is negligent of the Oregon Dig Law
- Billing every professional excavator/contractor that is negligent of the Oregon Dig Law

3. Additional Prudent Risk Reduction Actions

Additional risk reduction activities are not required by federal code, but Cascade engages in them because they increase the public's safety and the safety of Cascade's distribution system. Below are the additional safety initiatives that Cascade is currently pursuing:

- Safety Management System

Cascade continues to actively work on the development and implementation of the corporate wide safety management system (SMS). The SMS Department has been working on the execution of the strategic vision for the MDUG SMS program and a detailed project plan. As part of this vision and plan, the SMS Department is continuing to partner with employees across the utility and has achieved the following objectives:

- Corporate wide communication and training completed;
- Implementation of employee risk reporting dashboard;
- Finalized operational risk ranking methodology;
- Initial risks have been scored and prioritized;
- Finalized and communicated the SMS Risk Register to employees;
- Identified projects and initiatives focused on reducing SMS Risk Register items;
- Expanded program communication to include a SMS video and project tracking for employees;
- Completion of Quality Assurance process reviews; and
- Development and tracking of SMS program metrics.

- Engineering Project Process

Cascade is in the process of developing and implementing a defined process which provides guidance on the requirements for creating, reviewing and approving engineering projects. Also provides guidance on Quality Control (QC) requirements for engineering projects and related records collected throughout the project and a review of records post construction.

- Joint Utility Maximo Project

Maximo is a work and asset management system replacing fragmented operations systems into one centralized and integrated system. This includes replacing paper

processes, compliance tracking for leak survey and various other JIRA/Web based tracking tools. Maximo will provide the following benefits:

- Align operations business processes across the MDU Utilities Group.
- Replace fragmented and unintegrated operations technology systems/processes with one unified work and asset management system – improving efficiency of implementation and support.
- Reduce touch points and redundancy through replacement of paper processes and integrating systems.
- Gain enterprise-wide insight into asset tracking, construction, maintenance, compliance and costs. This includes tracking Operation's Key Performance Indicators (KPI's).
- Drive consistent workflows across the enterprise and improving work product results.
- Improve the user experience with consistent field data entry technology – lowers training needs, and limits confusion and errors.

The Maximo project is in year 2 of a 5-year project that is divided into 3 phases.

- The first phase includes all maintenance and compliance work (includes procedure alignment).
 - Equipment calibration, valve maintenance, pipeline patrols, electric distribution maintenance, regulator station/odorization/large meter/high pressure service set maintenance have all gone live in Maximo.
 - Leak Survey, Atmospheric Corrosion and Corrosion maintenance are scheduled to go live in Q1 2021.
- The second phase includes all construction activity and is scheduled to go live Q1 2023.
- The final phase includes the remaining electric maintenance functions.

VIII. 2020 Completed Capital Projects

Significant capital projects completed or scheduled to be completed in 2020 include:

PROJECT	DISTRICT	TYPE OF PIPE REPLACED, RISKS	ACTUAL / PLANNED IN-SERVICE DATE
BEND PIPE REPLACEMENT PHASE 8 SECTION 2	BEND	PRE-CNG PIPE - IDENTIFIED HIGH (RED) RISK IN DIMP, CORROSION AND LEAK HISTORY	FEBRUARY 2020
2020 BEND EVSP REPLACEMENT	BEND	PRE-CNG PIPE - IDENTIFIED HIGH (RED) RISK IN DIMP, CORROSION AND LEAK HISTORY	NOVEMBER 2020
6" BEND HP REPLACEMENT PHASE 2	BEND	IDENTIFIED HIGH (RED) RISK IN DIMP, CORROSION AND SHALLOW BURY DEPTH	AUGUST 2020
MILTON FREEWATER CANAL CROSSING REPLACEMENT	PENDLETON	REPLACE POORLY COATED AND DIFFICULT TO INSPECT CANAL CROSSING	DECEMBER 2020
4" MADRAS HP REPLACEMENT PHASE 3	BEND	PIPE INSTALLED IN 1962, CORROSION AND MATERIAL FAILURE (SEAM LEAKS) HISTORY	JULY 2020

IX. 2021 Capital Budget

In 2021, Cascade estimates it will invest approximately \$6.78 million in capital to address integrity management concerns identified through DIMP, TIMP, Abnormal Operating Conditions (AOC's), or safety related conditions identified by SME's and local district personnel. Below are all 2021 capital projects for system safety with costs that are estimated to exceed \$100,000:

PROJECT	DISTRICT	TYPE OF PIPE TO BE REPLACED, RISKS	ESTIMATED COST
2021 BEND EVSP REPLACEMENT	BEND	EVSP - IDENTIFIED HIGH (RED) RISK IN DIMP, CORROSION AND LEAK HISTORY	\$3,700,000
SHORTED CASING REPLACEMENT	ALL	REPLACEMENT OF SHORTED CASINGS	\$250,000
REPLACE 2,600' OF 10" WEST ONTARIO H.P. STEEL	EASTERN OREGON	EVSP – IDENTIFIED SHALLOW DEPTH ACROSS AN AGRICULTURAL FIELD, EXCAVATION DAMAGE AND OUTSIDE FORCE DAMAGE	\$1,144,000
HIGH PRESSURE SERVICE SET (HPSS) REPLACEMENT	ALL	REPLACEMENT OF HIGH RISK HPSS'S, AGE AND OUTSIDE FORCE DAMAGE	\$415,000
REPLACE 500' OF 6" H.P. MAIN HWY 30 PENDLETON	PENDLETON	REPLACE DIFFICULT TO INSPECT BRIDGE CROSSING, OUTSIDE FORCE DAMAGE	\$600,000
REPLACE 500' OF 4" H.P. MAIN HERMISTON	PENDLETON	PIPE IS EXPOSED, WITH SHALLOW BURY DEPTH, OUTSIDE FORCE DAMAGE	\$180,000
REPLACE 4" D.P. MAIN HWY 395 HERMISTON	PENDLETON	REPLACE POORLY COATED AND DIFFICULT TO INSPECT BRIDGE CROSSING, OUTSIDE FORCE DAMAGE	\$490,000

X. 2021 O&M Expenditures

Cascade's anticipated 2021 O&M budgets for DIMP, TIMP, Public Awareness, and Damage Prevention are listed below.

SAFETY INITIATIVES	ESTIMATED 2021 BUDGET
DIMP	\$250,000
TIMP	\$250,000
PUBLIC AWARENESS & DAMAGE PREVENTION	\$150,000

XI. Cost Benefit Analyses

Cost benefit analysis and alternatives analysis is sometimes difficult in the context of regulated safety programs. Such an analysis has not been of major consideration in this plan because most of the safety projects are mandated by 49 CFR Part 192, industry best practices, or by engineering and operational requirements. The assigned risk and prioritization for implementing these projects are based on studies and analysis of Cascade's transmission and distribution systems. Studies are performed on a regular basis as part of normal operations. These studies and analysis identify potential threats and risks that can then be mitigated or eliminated by the application of best engineering practices, operational knowledge/experience along with the experience of SME's. The study analysis is used to identify and implement measures and plans to address potential threats and risks, which are then prioritized by

projects or included in programs to most efficiently and effectively mitigate or eliminate the threat(s)/risk(s).

With programs and requirements prescribed in federal code such as DIMP and TIMP, the risk assessment analysis essentially acts as Cascade's cost benefit analyses for projects. If the analysis demonstrates a risk is significant, Cascade will invest in the costs to implement appropriate risk management actions. The value of public safety and human life is of significant consideration when reviewing potential threats. Cascade may consider alternative means for mitigating a threat, such as repairing a leak, damaged coatings, or corroded pipe rather than replacing the segment of the pipe, but usually, best practices or regulations for the specific circumstances dictate that solution.

XII. Regulatory and Legislative Update

PHMSA currently has several active rulemaking proceedings that will result in the adoption of new rules which will have a direct impact on Cascade's current and future safety programs. Once any of these rule makings are published, Cascade will assess the full impact of the new or amended rules to determine its full impact. Cascade will then modify existing safety projects and look at development of additional safety projects to address the new mandated requirements. Below is an overview of PHMSA rulemakings that Cascade is closely tracking.

1. Docket No. PHMSA-2011-0023 – Safety of Gas Transmission and Gathering Pipelines (Transmission Mega Rule)

The Notice of Proposed Rulemaking is a comprehensive update to the Transmission Integrity Management requirements and is the largest revision of the code since its inception in 1970. Currently the rule is being separated into three rulemakings.

- Part 1 of the rulemaking will include requirements around expansion of integrity management principles beyond HCAs, MAOP reconfirmation, material validation, record keeping, and changes to 49 CFR part 192, Subpart O. PHMSA issued Phase 1 on October 1, 2019.
- Part 2 of the rulemaking will include requirements around repair criteria, integrity management improvements, cathodic protection, management of change, and other related amendments.
- Part 3 of the rulemaking will include requirements around gas gathering pipeline.

2. Docket No. PHMSA-2018-0046 – Pipeline Safety: Gas Pipeline Regulatory Reform

Proposed amendments to the Federal Pipeline Safety Regulations that are intended to ease regulatory burdens on the construction, maintenance and operation of gas transmission, distribution, and gathering pipeline systems. The amendments in this proposal are based on PHMSA's considered review of public comments, petitions for rulemaking, and an agency initiative to identify appropriate areas where regulations might be repealed, replaced, or modified. PHMSA is proposing the following amendments to parts 191 and 192:

- Provide flexibility in the inspection requirements for farm taps;

- Repeal DIMP requirements for master meter operators;
 - Repeal submission requirements for the mechanical fitting failure reports;
 - Adjust the monetary damage threshold for reporting incidents for inflation;
 - Allow remote monitoring of rectifier stations;
 - Revise the inspection interval for monitoring atmospheric corrosion on gas distribution service pipelines;
 - Update the design standard for polyethylene (PE) pipe and raise the maximum diameter limit;
 - Revise test requirements for pressure vessels consistent with American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME BPVC);
 - Revise welder requalification requirements to provide scheduling flexibility; and PHMSA issued this Proposed Rule on May 28, 2020, and it has been submitted to the Office of the Federal Register for publication.
 - Extend the allowance for pre-tested short segments of pipe and fabricated units to pipelines operating at a hoop stress less than 30 percent of the specified minimum yield strength (SMYS) and above 100 pounds per square inch (psi).
3. Docket No. PHMSA-2013-0255 – Pipeline Safety: Valve Installation and Minimum Rupture Detection Standards

Revise the Federal Pipeline Safety Regulations applicable to newly constructed and entirely replaced onshore natural gas transmission and hazardous liquid pipelines to mitigate ruptures. Additionally, PHMSA is revising the regulations regarding rupture detection to shorten pipeline segment isolation times. These proposals address congressional mandates, incorporate recommendations from the National Transportation Safety Board, and are necessary to reduce the consequences of large-volume, uncontrolled releases of natural gas and hazardous liquid pipeline ruptures.

4. Docket No. PHMSA-2017-0151 – Class Location Change Requirements

Revise the Federal Pipeline Safety Regulations to amend the requirements for gas transmission pipeline segments that experience a change in class location. Under the existing regulations, pipeline segments located in areas where the population density has significantly increased must perform one of the following actions: reduce the pressure of the pipeline segment, pressure test the pipeline segment to higher standards, or replace the pipeline segment. This proposed rule would add an alternative set of requirements operators could use, based on implementing integrity management principles and pipe eligibility criteria, to manage certain pipeline segments where the class location has changed from a Class 1 location to a Class 3 location.

XIII. Significant Changes to Cascade's 2021 Safety Programs

Cascade continues to monitor PHMSA rulemakings and assess the changes Cascade will need to make to comply with newly adopted rules. Cascade is expecting to see some changes to some of the existing safety programs in 2021 due to the new regulatory requirements. Changes as a result of new regulatory requirements are tracked and managed through Cascade's MOC process.

APPENDIX A
Public Awareness and Damage Prevention Information

Underground, natural gas pipelines are located on your property and within the communities you live, work, and play. For your safety, please review this information and share with other members of your household/business.

Pipeline Safety and Reliability

Cascade is committed to delivering natural gas through a highly engineered pipeline system in a safe, environmentally sound process. Natural gas pipelines are the safest method of energy transportation, according to National Transportation Safety Board statistics. Cascade uses the latest technology, security, and industry practices to monitor pipelines, and maintain service and safety. We execute many programs to ensure your safety: 24/7 design and construction monitoring; integrity management; inspection and patrol; public safety outreach; and communication/training with emergency officials.

Suspect a Gas Leak?



Do you SEE?

A patch of discolored soil or dead vegetation, dirt being blown into the air, water bubbling or spraying into the air, fire or explosion.



Do you HEAR?

Unusual noises or a hissing sound.



Do you SMELL?

A strange odor similar to rotten eggs or a recently lit match.

If you suspect a natural gas leak, leave the area immediately. Do not use a cell phone or start a vehicle near any suspected natural gas leak. If leaking gas ignites, do not attempt to put out the flames.

**Call 911 and then Cascade Natural Gas.
Emergency Line: 888-522-1130**

Pipeline Markers

Pipeline markers are used to show the general route of a pipeline, but are not found near every pipeline.



Show:

- Approximate location
- Product transported
- Operator's name and emergency phone number

Do Not Show:

- Exact location
- Depth
- Number of pipelines

For more information on pipeline locations in your area, please go to www.npms.phmsa.dot.gov.

STEPS FOR SAFE DIGGING

1

**Whiteline
Dig Site**



2

**Call 811
to Locate
Utilities**



3

**Wait for
All Utilities to
be Marked**



4

**Dig Safe
Using Proven
Excavation
Methods**



If you damage a natural gas line and there is blowing gas, leave the area, call 911, and then call Cascade Natural Gas.

Report ALL damaged natural gas lines, including damage to the coated copper wire paralleling the gas line, to Cascade, even if there is no blowing gas. Minor nicks and wrap damage to the gas line, or damage to the copper wire, can be dangerous if left unrepaired.

Right-of-Ways

Pipeline right-of-ways or easements are strips of land in which pipelines are installed. Certain land uses are prohibited on a right-of-way or require permission from Cascade Natural Gas.

Las tuberías subterráneas de gas natural se encuentran en su propiedad y dentro de las comunidades donde vive, trabaja y juega. Para su seguridad, revise esta información y compártala con otros miembros de su hogar / negocio.

TUBERÍA DE SEGURIDAD Y CONFIABILIDAD

Cascade se compromete a suministrar gas natural a través de un sistema de tuberías altamente diseñado en un proceso seguro y ambientalmente racional. Los gasoductos de gas natural son el método más seguro de transporte de energía, según las estadísticas de la Junta Nacional de Seguridad en el Transporte. Cascade utiliza las últimas prácticas tecnológicas, de seguridad y de la industria para supervisar las tuberías y mantener el servicio y la seguridad. Cascade ejecuta muchos programas para garantizar su seguridad: Monitoreo de diseño y construcción las 24 horas del día, los 7 días de la semana; gestión de la integridad; inspección y patrulla; la divulgación de la seguridad pública; y comunicación/formación con funcionarios de emergencia.

¿Sospecha una fuga de gas?



Do you SEE?

Un parche de tierra decolorada o vegetación muerta, la suciedad sopla en el aire, el agua burbujeando o rociando en el aire, el fuego o la explosión.



Do you HEAR?

Ruidos inusuales o un silbido.



Do you SMELL?

Un olor extraño similar a los huevos podridos o a un encendedor recientemente iluminado.

Si sospecha que hay una fuga de gas natural, abandone el área inmediatamente. No utilice un teléfono celular ni encienda un vehículo cerca de cualquier sospecha de fuga de gas natural. Si se enciende la fuga de gas, no intente apagar las llamas. Llame al 911 y luego a Cascade Natural Gas.

Llame al 911 y luego a Cascade Gas Natural.
LÍNEA DE EMERGENCIA: 888-522-1130

MARCADORES DE TUBERÍAS

Los marcadores de tuberías se utilizan para mostrar la ruta general de un oleoducto, pero no se encuentran cerca de cada oleoducto.



MOSTRAR:

- La ubicación aproximada
- El producto transportado
- Nombre del operador y número de teléfono de emergencia.

NO MOSTRAR:

- La ubicación exacta
- La profundidad
- El número de tuberías

Para obtener más información sobre las ubicaciones de tuberías en su área, vaya a www.npms.phmsa.dot.gov

GUÍA PARA EXCAVAR SEGURO

1
Línea Blanca Área de Excavar



2
Llame 811 para Localizar



3
Espere a que se Marquen Todas las Utilidades



4
Excavar a salvo Usando probado Excavación Métodos



Si daña una línea de gas natural y hay gas soplado, salga de la zona, llame al 911 y luego a Cascade. Reporte TODAS las líneas de gas natural dañadas, incluido el daño al cable de cobre recubierto paralelo a la línea de gas, a Cascade, incluso si no hay gas de soplado. Los pequeños cortes y daños en la envoltura de la línea de gas, o daños en el cable de cobre, pueden ser peligrosos si no se reparan.

06/2020

DERECHO-DE-VÍAS

El derecho de vía o servidumbre de las tuberías son franjas de tierra en las que se instalan las tuberías. Ciertos usos de la tierra están prohibidos en un derecho de vía o requieren permiso de Cascade Natural Gas.

Our goal is to provide safe, reliable natural gas service to our customers and ensure the safety of people living and working near our natural gas pipelines. For your safety, please review this information and share with other members of your household/business.



In the Community to Serve®

www.cngc.com



Pipeline Safety Information

Questions or concerns?

888-522-1130 | awareness@cngc.com



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

Reasons to Call 811 Before You Dig and to Hand Dig Around Marked Utility Lines:

1. It's free. It's easy. It's the law.
2. It keeps you, your family, and your neighbors safe.
3. It keeps utility workers and emergency responders safe from having to respond to an accident if you damage a utility line.
4. There are millions of utility lines buried underground that bring vital services to the homes, schools, and businesses throughout your community (think natural gas, electricity, water, cable, fiber, etc.)
5. Damaging a utility line can cause service interruptions and cut off vital services in your area.
6. If you damage a utility line it may result in a large repair bill from the utility company.

When should you call 811?

Anytime you are "displacing earth." Including but not limited to; installing a fence, planting a tree/bush, pulling up tree roots, grading work, putting stakes in the ground for concrete work or temporary power, installing a mailbox or sign post.

Who should call 811?

Anyone who will be digging or displacing earth.

What should you do if you damage a natural gas line?

Leave the area, call 911, and then call Cascade Natural Gas. Report ALL damaged natural gas lines, including damage to the coated wire paralleling the gas line, to Cascade, even if there is no blowing gas. Minor nicks and wrap damage to the gas line, or damage to the coated wire, can be dangerous if left unrepaired.

Pipeline Safety and Reliability

Cascade Natural Gas is committed to delivering natural gas through a highly engineered pipeline system in a safe, environmentally sound process to meet your energy needs. Cascade uses the latest technology, security, and industry practices to monitor pipelines, and maintain service and safety. We execute many programs to ensure your safety; 24/7 design and construction monitoring, integrity management, inspection and patrol, public safety outreach, and communication/training with emergency officials.



Scratch this flame with your fingernail and sniff the gas odor.

The odor you smell is the harmless chemical we add to natural gas so you can detect a gas leak.

Learn How to Recognize a Natural Gas Leak



Do you SEE?

A patch of discolored soil or dead vegetation, dirt being blown into the air, water bubbling or spraying into the air, fire or explosion.



Do you HEAR?

Unusual noises or a hissing sound.



Do you SMELL?

A strange odor similar to rotten eggs or a recently lit match.

If you suspect a natural gas leak, leave the area immediately.

Call 911 and then Cascade Natural Gas at 888-522-1130.

Leaking gas is dangerous. It can cause fire or explosion. Do not use a cell phone, flip switches, or start a vehicle near any suspected natural gas leak. If leaking gas ignites, do not attempt to put out the flames.

Carbon Monoxide Poisoning

What is it? It is an odorless, colorless, tasteless and toxic gas. Breathing too much carbon monoxide (CO) deprives the body of oxygen and may cause immediate physical danger and even death.

How is it caused? Incomplete combustion by fuel, appliances and vehicles running in garages.

What are the symptoms? Symptoms can include dizziness, nausea, tightness in chest, headache and fatigue. Flu-like symptoms without the fever.

What should you do? If symptoms are severe, move victim into fresh air immediately and call 911 for medical assistance. Evacuate the structure until the cause of carbon monoxide is determined and eliminated.

How do you prevent it? Never block or close a source of air to a heat producing appliance. Never use a gas range/oven to heat your home. Never operate a car in an enclosed area, such as the garage. Install carbon monoxide detectors in your home and follow manufacturer recommendations for maintenance of your heating appliances.

Pipeline Markers Show:

- Approximate location
- Product Transported
- Operator's name and emergency phone number



For more information on pipeline locations in your area, please go to www.npms.phmsa.dot.gov.

Nuestro objetivo es proporcionar un servicio de gas natural seguro y confiable a nuestros clientes y garantizar la seguridad de las personas que viven y trabajan cerca de nuestros gasoductos de gas natural. Por su seguridad, revise esta información y compártala con otros miembros de su hogar/negocio.



In the Community to Serve®

www.cngc.com



¡Información de seguridad de tubería!

¿Preguntas o preocupaciones?

888-522-1130 | awareness@cngc.com



**Entérese de lo que hay enterrado.
Llame al 811 antes de excavar.**

Razones para llamar al 811 antes de excavar y a mano de excavación alrededor de líneas de utilidad marcadas:

1. Es gratis. Es fácil. Es la ley.
2. Te mantiene a ti, a tu familia y a tus vecinos a salvo.
3. Mantiene a los trabajadores de servicios públicos y a los servicios de emergencia a salvo de tener que responder a un accidente si daña una línea de servicios públicos.
4. Hay millones de líneas de servicios públicos enterradas bajo tierra que traen servicios vitales a los hogares, escuelas y negocios en toda su comunidad (piense en gas natural, electricidad, agua, cable, fibra, etc.)
5. Dañar una línea de servicios públicos puede causar interrupciones del servicio y cortar servicios vitales en su área.
6. Si daña una línea de servicios públicos, puede resultar en una factura de reparación grande de la compañía de servicios públicos.

¿Cuándo debería llamar al 811?

Cada vez que estás "desplazando la tierra". Incluyendo pero no limitado a; la instalación de una valla, la plantación de un árbol / arbusto, tirar de las raíces de los árboles, el trabajo de clasificación, la colocación de estacas en el suelo para trabajos de hormigón o energía temporal, la instalación de un buzón de correo o poste de señalización.

¿Quién debe llamar al 811?

Cualquiera que esté cavando o desplazando la tierra.

¿Qué debe hacer si daña una línea de gas natural?

Salga del área, llame al 911 y luego llame a Cascade Natural Gas. Reporte TODAS las líneas de gas natural dañadas, incluidos los daños en el cable recubierto que paralelo a la línea de gas, a Cascade, incluso si no hay gas soplado. Los golpes menores y los daños en la envoltura a la línea de gas, o los daños en el alambre recubierto, pueden ser peligrosos si no se reparan.

Seguridad y fiabilidad de las tuberías

Cascade Natural Gas se compromete a suministrar gas natural a través de un sistema de tuberías altamente diseñado en un proceso seguro y ambientalmente racional para satisfacer sus necesidades energéticas. Cascade utiliza las últimas tecnologías, seguridad y prácticas de la industria para supervisar las tuberías y mantener el servicio y la seguridad. Ejecutamos muchos programas para garantizar su seguridad; monitoreo 24/7 de diseño y construcción, gestión de la integridad, inspección y patrulla, divulgación de seguridad pública y comunicación/entrenamiento con funcionarios de emergencia.

Al otro lado rasguñe la llama con su uña y huela el olor de gas

El olor que usted hule son químicas inofensivas que añadimos al gas natural para que pueda detectar una fuga de gas.

Aprenda a reconocer una fuga de gas natural



¿lo ves?

Un parche de tierra decolorada o vegetación muerta, la suciedad sopla en el aire, el agua burbujeando o rociando en el aire, el fuego o la explosión.



¿tu escuchas?

Ruidos inusuales o un silbido.



¿huelas?

Un olor extraño similar a los huevos podridos o a un encendedor recientemente iluminado.

Si sospecha que hay una fuga de gas natural, abandone el área inmediatamente.

Llame al 911 y luego a Cascade Natural Gas al 888-522-1130.

La fuga de gas es peligrosa. Puede causar un incendio o una explosión. No utilice un teléfono celular, interruptores de volteo ni inicie un vehículo cerca de cualquier sospecha de fuga de gas natural. Si se enciende gas con fugas, no intente apagar las llamas.

Intoxicación por monóxido de carbono

¿Qué es? Es un gas inodoro, incoloro, insípido y tóxico. Respirar demasiado monóxido de carbono (CO) priva al cuerpo de oxígeno y puede causar peligro físico inmediato e incluso la muerte.

¿Cómo se causa? Combustión incompleta por combustible, electrodomésticos y vehículos que se ejecutan en garajes.

¿Cuáles son los síntomas? Los síntomas pueden incluir mareos, náuseas, opresión en el pecho, dolor de cabeza y fatiga. Síntomas similares a los de la gripe sin fiebre.

¿Qué deberías hacer? Si los síntomas son graves, mueva a la víctima al aire libre inmediatamente y llame al 911 para obtener asistencia médica. Evacuar la estructura hasta que se determine y elimine la causa del monóxido de carbono.

¿Cómo lo previenes? Nunca bloquee ni cierre una fuente de aire a un aparato de producción de calor. Nunca use una gama de gas /horno para calentar su hogar. Nunca opere un coche en un área cerrada, como el garaje. Instale detectores de monóxido de carbono en su hogar y siga las recomendaciones del fabricante para el mantenimiento de sus aparatos de calefacción.

Marcadores de tuberías Mostrar:

- Ubicación aproximada
- Producto transportado
- Nombre del operador y número de teléfono de emergencia

Para obtener más información sobre las ubicaciones de tuberías en su área, vaya a www.npms.phmsa.dot.gov.



STEPS FOR SAFE DIGGING

1

Whiteline
Dig Site



2

Call 811
to Locate
Utilities



3

Wait for
All Utilities to
be Marked



4

Dig Safe
Using Proven
Excavation
Methods



For more information on safe digging refer to
CGA Best Practices at commongroundalliance.com.



Underground Utilities are Everywhere

Call **811** before you dig.

IT'S FREE. IT'S EASY. IT'S THE LAW.



In the Community to Serve®

www.cngc.com | 888-522-1130



In the Community to Serve®

DIG SAFE AROUND UTILITIES



Call **811** before you dig.

Protect yourself, coworkers,
and the public.

DIGGING SAFELY IS A SHARED RESPONSIBILITY

Cascade Natural Gas offers FREE contractor/excavator training.

Contact us to schedule your FREE training. awareness@cngc.com

Customer Service/Emergency: 888-522-1130

Get more information and view a schedule of classes at www.cngc.com/free-training.

Cascade is committed to keeping you safe by reducing excavation damage to underground natural gas lines through education and awareness. Always call **811** before you dig to get your utility lines located, and dig safely using proven excavation methods.

Please refer to your state's Dig Law for more information.



FOLLOW THESE SIMPLE STEPS

- Outline/mark your planned dig site in white paint.
- Call 811 or visit www.Call811.com two business days before you plan to dig to have underground utility lines marked for free.
- If you are a subcontractor, protect yourself and your company by calling 811 for a locate ticket. The general contractor's ticket does not apply to anyone except them.
- Wait for all utility companies listed on the ticket to mark their utility lines before digging.
- Maintain the locate marks throughout the lifetime of the project.
- There is a tolerance zone on either side of the locate marks. Carefully hand dig within the tolerance zone and determine the exact location of the utility before proceeding.
- Use acceptable backfill (such as sand or rock-free dirt) and proper compaction to avoid damage to utility lines.
- Stop digging immediately if you find unmarked natural gas lines and call 811 to have them marked.
- If there is a release of natural gas, leave the area and call 911. Then, call Cascade and keep others clear of the area.
- Never try to fix a damaged natural gas line or try to restrict the gas flow in any way.
- Call Cascade to report all damaged natural gas lines - even if there is no blowing gas. Minor nicks and wrap damage can be dangerous if left unrepaired.

UTILITY COLOR CODES

All utilities will mark the location and path of their underground facilities using the following colors:

WHITE: Proposed Excavation

FLUORESCENT 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

GUÍA PARA EXCAVAR SEGURO

1

Línea Blanca Área de Excavar



2

Llame 811 para Localizar



3

Espere a que se Marquen Todas las Utilidades

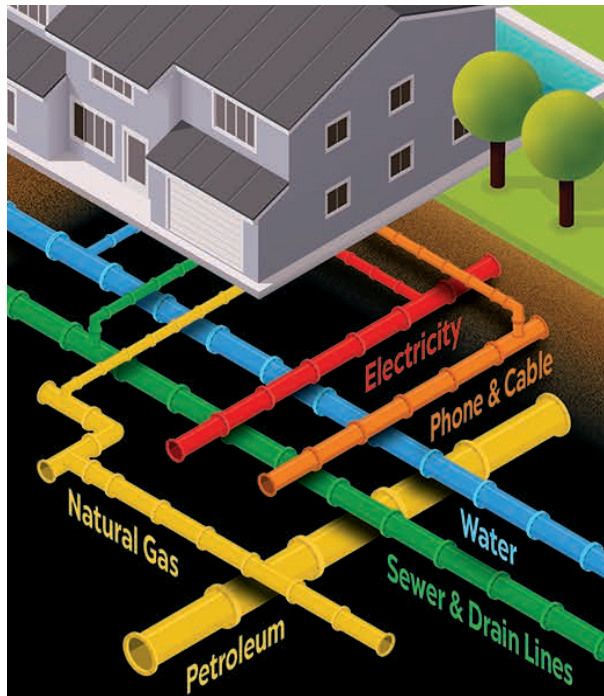


4

Excavar a salvo Usando probado Excavación Métodos



Para obtener más información sobre la excavación segura, consulte Mejores prácticas de CGA en commongroundalliance.com.



Los servicios públicos subterráneos están en todas partes.



Entérese de lo que hay enterrado. Llame al 811 antes de excavar.

ES GRATIS. ES FÁCIL. ES LA LEY.



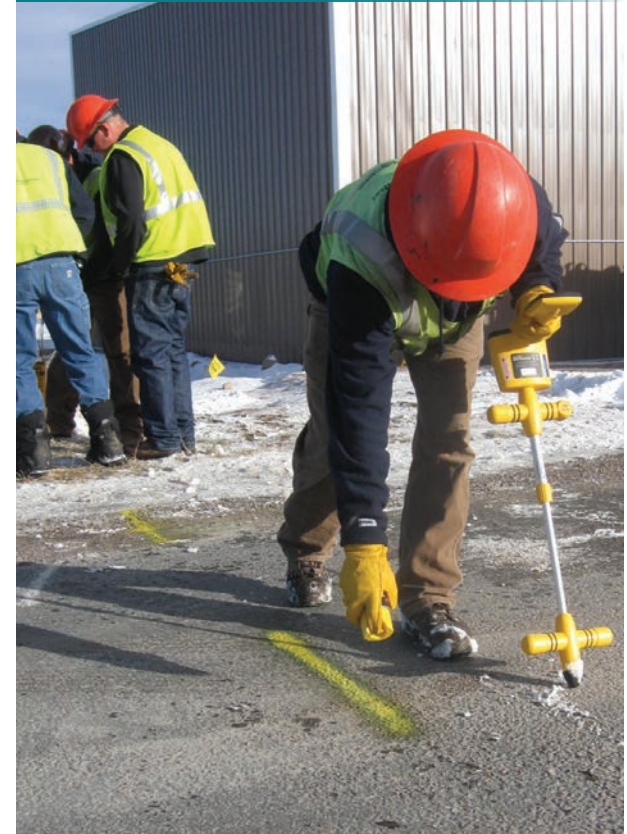
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In the Community to Serve®

ESCAVAR SEGURO ALREDEDOR DE LOS SERVICIOS PÚBLICOS.



Entérese de lo que hay enterrado. Llame al 811 antes de excavar.

Protéjase a sí mismo, a sus compañeros de trabajo y al público.

ESCAVAR CON SEGURIDAD ES RESPONSABILIDAD COMPARTIDA

Cascade Natural Gas ofrece GRATIS contratistas/entrenamiento del excavador.

Contacte para preguntas o para programar GRATIS entrenamiento
awareness@cngc.com

Servicio al cliente/Emergencia: 888-522-1130

Obtenga más información y vea un horario de clases en www.cngc.com/free-training.

Cascade Natural Gas se compromete para mantenerlo seguro reduciendo el daño de excavación a instalaciones subterráneas a través de la educación y la concienciación. Siempre llame **811** antes de escavar para obtener sus líneas de servicios públicos ubicados y escavar con seguridad utilizando métodos de excavación probados.

Por favor, consulte la ley de excavación de su estado para obtener más información.



SIGA ESTOS SENCILLOS PASOS

- Esbozar/marcar su sitio de excavación planeado en pintura blanca.
- Llame al 811 o visite www.Call811.com dos días de negocio hábiles antes de que planee cavar para tener líneas de servicios públicos subterráneas marcadas de forma gratuita.
- Si usted es un subcontratista, protéjase a sí mismo y a su empresa llamando al 811 para obtener un boleto de localización. El boleto del contratista general no se aplica a nadie excepto a ellos.
- Espere a que todas las empresas de servicios públicos que aparecen en el boleto marquen sus líneas de servicios públicos antes de escavar.
- Mantener las marcas de localización durante toda la vida útil del proyecto.
- Hay una zona de tolerancia a ambos lados de las marcas de localización. Profundice cuidadosamente dentro de la zona de tolerancia y determine la ubicación exacta de la utilidad antes de continuar.
- Utilice relleno aceptable (como arena o suciedad libre de rocas) y una compactación adecuada para evitar daños en las líneas de servicios públicos.
- Deje de escavar inmediatamente si encuentra líneas de gas natural sin marcar y llame al 811 para que las marquen.
- Si hay una liberación de gas natural, salga de la zona y llame al 911. Luego, llama a Cascade y mantén a otros alejados del área.
- Nunca intente fijar una línea de gas natural dañada ni intente restringir el flujo de gas de ninguna manera.
- Llame a Cascade para informar de todas las líneas de gas natural dañadas, incluso si no hay gas que sopla. Los golpes menores y el daño envolver pueden ser peligrosos si no se reparan.

CÓDIGOS DE COLOR DE UTILIDAD

Todos los servicios públicos marcarán la ubicación y la ruta de sus instalaciones subterráneas utilizando los siguientes códigos:

BLANCO: Excavación Propuesta

ROSA: Marcación de Inspección Temporal

ROJO: Líneas de Transmisión Eléctricas

AMARILLO: Gas, Oil, Steam, Petroleum or Gaseous Materials

ORANGE: Gas, Vapor, Petroleo, Químicos

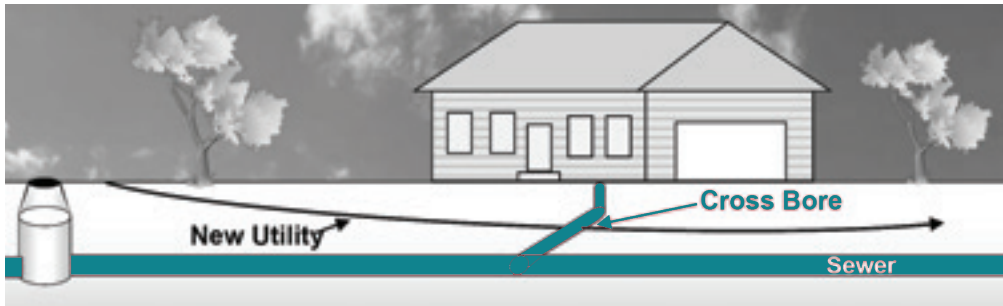
AZUL: Agua Potable

MORADO: Agua Regenerada

VERDE: Alcantarillas, Líneas de Drenaje

CALL BEFORE YOU CLEAR

ALWAYS CALL CASCADE NATURAL GAS BEFORE CLEARING A SEWER LINE



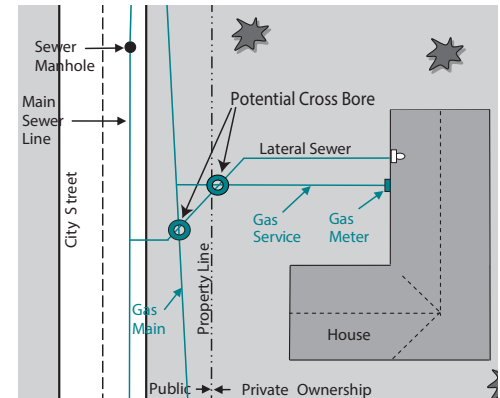
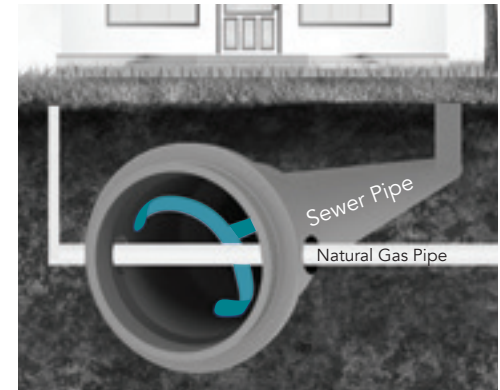
There is a possibility that our gas pipeline may cross through the sewer pipe on your property. This is called a cross bore and occurs when trenchless technology was used to install underground utility lines.

Plumbers and homeowners often use a rotating cutter that can be inserted in the sewer line to clear a clog. While good for clearing out objects such as tree roots, these devices can also cut through natural gas pipelines and other underground utility lines that were unintentionally installed through sewer lines that were not mapped or installed with locating technology.

If a cross bore exists, it can cause a natural gas emergency if the pipeline is cut. Natural gas could enter the sewer system and create a hazardous situation, including explosion, complete destruction of the structure, injury, or death.

FOR YOUR SAFETY:

- Call Cascade Natural Gas at **888-522-1130** prior to clearing your sewer line. We will promptly arrive to locate and mark our natural gas pipelines, free of charge.
- Never clear a sewer line until the clog has been identified.
- If you notice bubbles rising in the toilet bowl or through standing water, or a strong odor of natural gas, immediately evacuate the premises leaving the exit door open.
- From a safe distance, call 911 and Cascade Natural Gas at **888-522-1130**.



For additional cross bore information, check out the Cross Bore Safety Association website: crossboresafety.org or the Call Before You Clear website: callbeforeyouclear.com



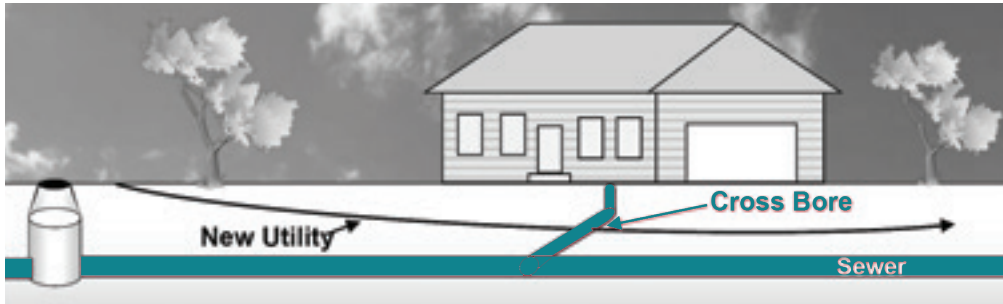
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LLAME ANTES DE DESPEJAR

SIEMPRE LLAME AL CASCADE NATURAL GAS ANTES DE LIMPIAR UNA LINEA DE ALCANTARILLADO



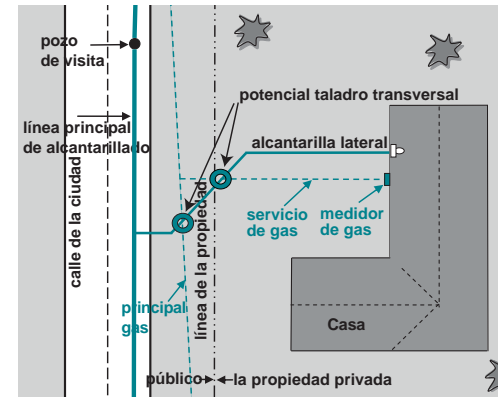
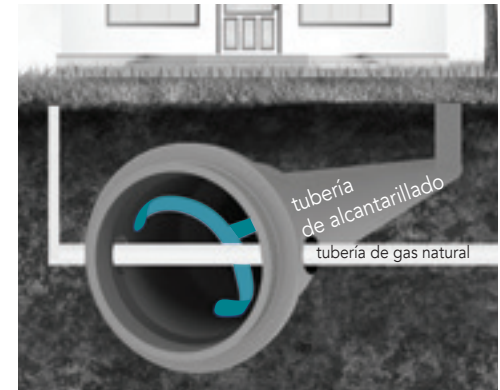
Existe la posibilidad de que nuestra línea de gas pueda cruzar a través de la tubería de alcantarillado en su propiedad. Esto se llama un agujero cruzado y ocurre cuando se utilizó la tecnología sin zanjas para instalar líneas de servicios públicos subterráneas.

Los fontaneros y propietarios a menudo utilizan una cortadora giratoria que se puede insertar en la línea de alcantarillado para limpiar un obstrucción. Si bien son buenos para eliminar objetos como las raíces de los árboles, estos dispositivos también pueden cortar a través de tuberías de gas natural y otras líneas de servicios públicos subterráneas que se instalaron involuntariamente a través de líneas de alcantarillado que no se mapearon ni instalaron con tecnología de localización.

Si existe un agujero cruzado, puede causar una emergencia de gas natural si se corta el gasoducto. El gas natural podría entrar en el sistema de alcantarillado y crear una situación peligrosa, incluyendo la explosión, la destrucción completa de la estructura, lesiones o la muerte.

PARA SU SEGURIDAD:

- Llame a Cascade Natural Gas al **888-522-1130** antes de limpiar su línea de alcantarillado. Llegaremos rápidamente para localizar y marcar nuestros gasoductos de gas natural, de forma gratuita.
- Nunca despeje una línea de alcantarillado hasta que se haya identificado la obstrucción.
- Si observa burbujas que se elevan en el inodoro o a través de agua estancada, o un fuerte olor a gas natural, evacúe inmediatamente las instalaciones dejando la puerta de salida abierta.
- Desde una distancia segura, llame al 911 y Cascade Natural Gas al **888-522-1130**.



Para obtener información adicional sobre el diámetro interior, consulte la página de internet de Cross Bore Safety Association: crossboresafety.org o la Llamada Antes De Borrar página de internet: callbeforeyouclear.com



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SUSPECT A GAS LEAK?



Do you SEE?

A patch of discolored soil or dead vegetation, dirt being blown into the air, water bubbling or spraying into the air, fire or explosion.



Do you HEAR?

Unusual noises or a hissing sound.



Do you SMELL?

A strange odor similar to rotten eggs or a recently lit match.

If you suspect a natural gas leak, leave the area and then call us. **DO NOT** use a cell phone or start a vehicle near any suspected natural gas leak. If leaking gas ignites, do not attempt to put out the flames. **Call 911** and then **Cascade Natural Gas**.

EMERGENCY LINE:
888-522-1130



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You are receiving this postcard because a high pressure, underground, natural gas pipeline is located on or near your property. For your safety, please review this information and share with other members of your household/business.



Dig Safe Guide

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

IT'S FREE. IT'S EASY. IT'S THE LAW.

1

Whiteline Dig Area



Outline/mark your planned dig site in white.

Detach Dig Safe Guide along the line

2









Call 811 to Locate



Call at least 2 full business days before you plan to dig. The call and the service are free.

3

Markings for Underground Utility Lines

Proposed Excavation	
Temporary Survey Markings	
Electric Power Lines, Cables, Conduit and Lighting Cables	
Gas, Oil, Steam, Petroleum or Gaseous Materials	
Communication, Alarm or Signal Lines, Cables or Conduit	
Potable Water	
Reclaimed Water, Irrigation and Slurry Lines	
Sewers and Drain Lines	



Wait!

Do not dig until all known utilities are marked.

4



Dig Safe

Maintain the marks. Determine the precise location of the marked utilities by hand-digging. Dig safely using proven excavation methods.

If you damage a natural gas line and there is blowing gas, leave the area, call 911, and then call Cascade.

Report all damaged natural gas lines to Cascade - even if there is no blowing gas. Minor nicks and wrap damage can be dangerous if left unrepaired.



In the Community to Serve

**CUSTOMER SERVICE/
EMERGENCY LINE:
888-522-1130**



PIPELINE SAFETY & RELIABILITY:

Cascade Natural Gas is committed to delivering natural gas through a highly engineered pipeline system in a safe, environmentally sound process. According to National Transportation Safety Board statistics, natural gas pipelines are the safest method of energy transportation. Cascade uses the latest technology, security, and industry practices to monitor pipelines, and maintain service and safety. Cascade executes many programs to ensure your safety: Design and construction monitoring 24 hours a day, seven days a week; integrity management; inspection and patrol training; public awareness outreach; and communication/training with police and fire officials.

RIGHT-OF-WAYS:

Pipeline right-of-ways or easements are strips of land in which pipelines are installed. Certain land uses are prohibited on a right-of-way or require permission from Cascade Natural Gas.

HOW TO OBTAIN MORE INFORMATION:

If you would like more details about the safety information included on this postcard, please call our customer service center at 888-522-1130, visit our website at www.cngc.com, or e-mail us at awareness@cngc.com.

Esta información está disponible en español en nuestro sitio web www.cngc.com

PIPELINE MARKERS

Pipeline markers are used to designate the general route of a pipeline, but are not found near every pipeline. Pipeline markers show the approximate location of the pipeline, the product transported, the operator's name, and operator's emergency phone number. Pipeline markers will not show the exact location, depth, or number of pipelines.

For more information on what pipelines are in your area, please go to www.npms.phmsa.dot.gov. Please note, the viewer does not contain all gas distribution lines, but will show the larger transmission lines in an area.

Cascade Natural Gas Corporation
8113 W Grandridge Blvd
Kennewick, WA 99336

PRSR MKTG
U.S. Postage
PAID
Minuteman
Press

From: [CNGC Awareness](#)
To: ACCENTLANDSCAPEDESIGN@GMAIL.COM
Subject: A Damage Prevention Message from Cascade Natural Gas
Date: Wednesday, September 18, 2019 7:25:00 PM

Hello CHRIS MARRONE

CASCADE NATURAL GAS' NUMBER ONE GOAL IS TO PROTECT YOU, YOUR EMPLOYEES, AND OUR COMMUNITY FROM AN UNINTENDED RELEASE OF NATURAL GAS CAUSED BY EXCAVATION DAMAGE.

Cascade Natural Gas wants to send a big THANK YOU to ACCENT LANDSCAPE DESIGN CONSTR for calling 811 before each of your excavation projects! But calling 811 is only the first step. Between Q1 of 2018 and the end of Q1 of 2019, approximately 48% of damages to Cascade's natural gas pipelines were caused by insufficient excavation practices! With your help, we want to get this number down to zero!

Below are some important things to keep in mind before starting your next digging project to help ensure your project remains safe, on time, and free of expensive repairs:

- **Review the [Oregon State Dig Law](#), [CGA's Excavation Best Practices](#), and Cascade's [Damage Prevention Brochure](#).**
- **Include Damage Prevention in your Standard Operating Procedures and train your employees on it.**
- **Review the location of underground facilities with site personnel and ensure the excavating crew understands the hazards associated with damaging facilities in pre-construction/safety tailgate meetings.**
- **It is your responsibility to maintain the locate marks throughout the life of the project or the ticket life, whichever is the shorter period. If Cascade needs to come out to refresh marks or relocate, we will but please do your best to maintain the original marks.**
- **You must use hand tools or other non-invasive methods to determine the exact location of the pipeline or down to 24 inches beyond the depth of intended excavation within 24 inches of the outside dimensions of a marked underground facility before proceeding with excavation.**
 - Other acceptable methods to determine the precise location of the utility include pot-holing, vacuum excavation, hand tools that use air or water under pressure, or other non-invasive methods.
 - *Although considered non-invasive by many, care should be taken when using these methods near pipe coating as they have been known to cause damage to the wrapping.*
- **Keep mechanized equipment away from the pipeline and ALWAYS USE A SPOTTER to ensure clearance is kept. A release of natural gas can ignite with the mechanized equipment as the ignition source.**
- **The excavator must support or brace exposed facilities to protect them from moving or shifting when they are no longer supported or protected by soil. Workers should not climb on, strike, or attempt to move exposed facilities.**
- **Use acceptable backfill (such as sand or rock-free dirt) and proper compaction to avoid damage to facilities.**
- **Call Cascade at 888-522-1130 to report all hit lines - even if there is no blowing gas. Minor nicks, wrap damage, dents, and scratches can be dangerous if left unrepaired.**
- **[Click here](#) to learn more about indications of a leak, hazards of a release, and emergency**

response.

If you would like excavation safety training, printed materials, 811 promotional items, or have additional questions please do not hesitate to contact us or visit us online www.cngc.com/safety-education.

Please forward to the correct person at your organization to share this message with applicable employees and help us improve the safety of your staff and our community!

****This message is a public service announcement with the sole intent of improving safety education regarding pipeline safety. You are receiving this email because you or someone from your organization submitted a locate ticket request to Oregon 811 due to the excavation activities your organization was performing.***

Thank you for your time,

Lynsay Demko

Public Awareness & Damage Prevention

Awareness@cngc.com

Ph (509) 734-4584 | Cell (509) 572-8475

Customer Service/Emergency Line 888-522-1130



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EMERGENCY GAS SHUT OFF

To be fully prepared for an emergency, you should know where your gas meter is located and how to shut off the natural gas service to your home.

The following are examples of emergencies; however, it is not a comprehensive list:

- Fire in structure or near the meter.
- Earthquakes with enough magnitude to displace equipment.
- Floods.
- Wind damage.
- Carbon monoxide symptoms.
- Gas odors.

If an emergency occurs, but ***you do not experience flulike symptoms or smell or hear escaping gas, then you probably do not need to shut off your gas.*** Doing so may deprive you of service unnecessarily.

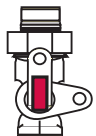
However, ***if you are experiencing flulike symptoms without a fever, are in doubt, or smell or hear escaping gas,*** then:

DO NOT:

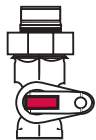
- Switch anything on or off, such as lights, electrical switches, garage door openers or vehicles.
- Use e-cigarettes, smoke, use lighters, matches or other open flames.
- Use a telephone of any type, including cell phones.
- Return for personal items.

DO:

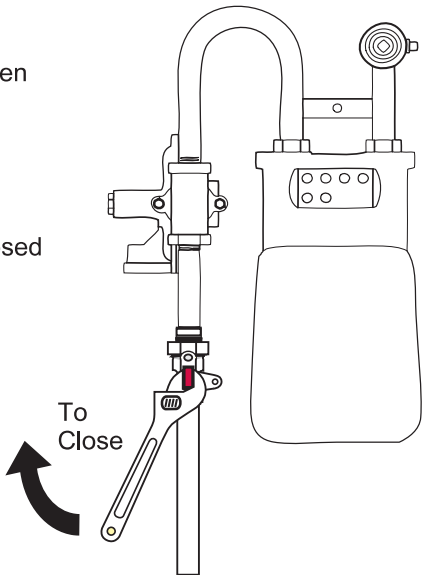
- Immediately leave the house.
- From a remote location, call Cascade Natural Gas at **888-522-1130** or call emergency responders at **911**.
- At your discretion, **if it is safe to do so, shut off the gas meter** following the instructions on the reverse side of this card.
- Once the gas is off, for your safety, **LEAVE IT OFF** until a Cascade Natural Gas service representative can check out the system. The equipment will be checked by a technician, who can ensure that the system is intact and operable.



Open



Closed



HOW TO SHUT OFF A GAS METER

- Locate the meter shut-off valve (usually the first fitting) on the gas supply pipe coming out of the ground.
- Use a long-handled wrench to turn the valve one-quarter turn so that the lever is crosswise to the pipe (see diagram).
- Once the valve is off, **LEAVE IT OFF** until a qualified Cascade Natural Gas service representative can check out the system.



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In the Community to Serve®

All Emergencies – Customer Service:
888-522-1130 • www.cngc.com



(see reverse side) 02/20



CASCADE
NATURAL GAS

C O R P O R A T I O N [®]

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Excess Flow Valve (EFV)

NOTIFICATION

The United States Department of Transportation (DOT) has issued a pipeline safety regulation requiring natural gas utility companies to notify customers about the availability of Excess Flow Valves (EFV) for installation on the natural gas service line to their home or business.

What is an EFV?

An EFV is a safety device designed to automatically stop or restrict the flow of natural gas if an underground pipe is broken or severed. Such damage is usually the result of some type of excavation. Although an EFV may help limit the effects or damage of such an incident, the best way to protect against such incidents is to ensure that anyone excavating on your property has called 811 to have buried pipelines properly marked before digging. Installation of an EFV will not protect against customer appliance gas leaks, small gas service line punctures or gas meter leaks. An EFV may not protect a pipeline from damage caused by flooding or earthquakes. EFVs are not available for some customers due to the amount of gas used, areas with delivery pressure less than 10 psi or other circumstances that hinder the effectiveness of the EFV.

Where is an EFV installed?

The EFV is installed underground on the service line that runs between the gas main located in public right of way or a dedicated utility easement and the natural gas meter. Generally the EFV is installed as close as possible to the gas main. In some instances the location may need to be installed further from the gas main to accommodate interference from other buried structures.

How much does it cost to have an EFV installed?

If you would like to have an EFV installed in your service line, please contact Cascade Natural Gas Corporation at 888-522-1130 or email customerservice@cngc.com. The customer is solely responsible for the cost associated with installing the EFV. There will be no ongoing cost to the customer associated with the maintenance or replacement of the EFV. Installation costs vary greatly due to different soil conditions within our service territory. Estimates for cost and timeframe for construction will be provided as requested on a case-by-case basis. The EFV will be installed at a time that is mutually agreeable to the company and customer. Since the EFV will be installed on Cascade's natural gas pipe, only Cascade or its approved contractors may perform the installation.



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

Keep Snow and Ice Away From Meters

As we enter the winter season and the snow begins to fall, customers are encouraged to inspect their natural gas meter(s) on a regular basis and remove any ice and snow built up. This is for your personal safety. Keeping your meter(s) clear of accumulation will help prevent damage that could result in a hazardous situation.

Why is it important to keep your meter clear of snow and ice buildup?

- Accumulated snow and ice places stress on the regulator and meter piping, and could cause gas to leak into your home and create an unsafe condition.
- Excessive snow cover may result in abnormal pressure, affect appliance operation and interrupt your service.
- If there is an emergency, response crews will need clear access to your meter.

Meters are designed to withstand extreme weather conditions, but remember to protect them from ice and snow buildup during the harsh winter months.

- When removing heavy accumulations of snow or ice, do not strike meters with snow blowers, blades or shovels.
- Do not kick your meter to break or clear ice.
- Use a broom, a snow brush or your hands to lightly remove snow and ice that is capable of being removed. For extremely heavy ice buildup, please contact Cascade Natural Gas.
- Remove icicles and snow from overhead eaves and gutters to prevent damage to the meter as they fall. Also, dripping water can splash and freeze on the meter or vent pipes.



Carefully clear and keep the snow and ice away from the meter for your personal safety.

Meter Reading and Safety Requires Clear Access to Meter at All Times

Ice and snow may block the electronic reading of your meter. Our desire is to accurately bill your natural gas usage.

- Please keep the area in front of and around your gas meter clear at all times. If you are storing a boat or trailer in front of your meter, try not to completely block off the meter.
- Please contact Cascade Natural Gas to discuss the building of decks, boxes or landscaping planned around your meter to avoid creating a hazardous situation.

Excavation damage prevention

The greatest risk to underground natural gas pipelines is accidental damage during excavation. Using recommended safe digging practices prevents harm to pipelines and services on your property. Call 811 two (2) business days before you dig.



If you believe damage has occurred around the meter, or you have no heat or smell gas, call Cascade Natural Gas immediately.

All Emergencies – 24-Hour Response – 888-522-1130

Customer Service

888-522-1130

Call 7 a.m.-7 p.m. Monday-Friday

www.cngc.com

Thank you for your cooperation.



In the Community to Serve®

IF YOUR NATURAL GAS SERVICE IS INTERRUPTED FOR ANY REASON, PLEASE CALL US IMMEDIATELY: 888-522-1130.

Natural Gas Smells Bad for a Good Reason

Huele mal por una buena razón

In its natural state, natural gas is odorless and colorless. For easy detection, Cascade Natural Gas injects an odorant called mercaptan into the gas before it is inserted into the distribution system. Mercaptan gives off a foul smell, reminiscent of rotten eggs or sulfur.



**Scratch this egg with your fingernail
and sniff the gas odor.**

Rasguñe esta huevo con su uña y huela el olor del gas.





What To Do In Case Of A Natural Gas Leak

A natural gas leak can be dangerous because it increases the risk of fire or explosion. Here are safety rules to follow if you smell the odor of mercaptan.

Aquí están las reglas de seguridad si huele el olor a mercaptán.

DON'T / no hacer

- Turn on or turn off any lights or electrical switches, or unplug appliances.
encienda las luces o los interruptores eléctricos, o desenchufe los electrodomésticos.
- Smoke or use e-cigarettes, lighters, matches or other open flames.
Fume o use cigarrillos electrónicos, encendedores, fósforos u otras llamas abiertas.
- Turn on or off any battery-powered, rechargeable or electrical device, including phones, garage door openers, radios, TVs, computers or any device that could create a spark.
encienda o apague cualquier dispositivo con pilas, recargable o eléctrico.
- Use telephones of any type, including cordless, cell or landline.
use teléfonos de cualquier tipo, incluidos teléfonos inalámbricos, celulares o fijos.

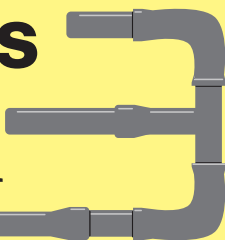
DO / hacer

- Have occupants exit the building immediately.
haga que los ocupantes salgan del edificio inmediatamente.
- If you are outside, leave the area immediately.
si está afuera, abandone el área inmediatamente.
- Go to a safe location and call Cascade Natural Gas at 888-522-1130.
vaya a otro lugar y llame a Cascade Natural Gas al 888-522-1130.
- Keep away until given the "all clear" from a gas company employee or emergency official.
manténgase alejado hasta que el empleado de la compañía de gas o el oficial de emergencia le dé el visto bueno.

888-522-1130 | www.cngc.com |     

Your Gas Piping

Important Customer Information



The house piping from Cascade Natural Gas' meter to an appliance belongs to the customer; maintenance of the house piping is the customer's responsibility. Be sure it is the proper kind of pipe and that it is installed, tested, and maintained in accordance with applicable state and local piping codes. The piping should be installed by a qualified person and inspected by local building officials. Avoid burying house piping under buildings or placing structures on top of natural gas lines whenever possible. The installer and building official can provide specific, detailed requirements for installation. Plumbing contractors and heating contractors can assist in inspecting and repairing the house piping. If existing underground piping is not installed to current code standards, it may represent a hazard.

Particular attention should be given to protecting any underground house piping from corrosion. If the piping is not maintained, it may be subject to the potential hazards of corrosion leakage. Piping should be periodically inspected for leaks and corrosion. A repair must be made if any unsafe condition is discovered.

Call 811 two business days before digging to alert utilities to locate and mark THEIR buried lines from the street to your house. This is a free service. These locates do not include house piping you may have installed to your property and must be located by a private company. Dig carefully by hand within 24 inches of the marked pipeline.



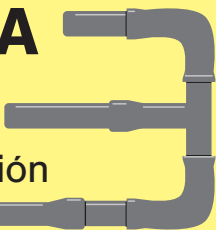
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www.cngc.com

04/2020

SU TUBERÍA DE GAS



Importante Información del cliente

Toda aquella tubería desde el medidor de Cascade Natural Gas hasta los electrodomésticos en su hogar son propiedad del dueño de casa, cuales mantenimiento y responsabilidad son del propietario. Asegúrese que el tipo de tuberías que use sean apropiables, instaladas, probadas y mantenidas en conforme con aplicables códigos de tuberías locales y estatales. La instalación de la tubería debe ser el trabajo de un contratista clasificado e inspeccionada por funcionarios locales de construcción. Evite enterrar las tuberías de la casa debajo de edificios o colocar estructuras sobre las líneas de gas natural siempre que sea posible. Un contratista o funcionario de construcción puede proporcionarle detalles y requisitos específicos. Unos contratistas de plomería o calefacción pueden asistirle en inspeccionar o proporcionarle reparaciones de tuberías en su casa. Si la existente tubería subterránea no está instalada según a los estándares de código actuales, puede representar un peligro.

Debe prestarse atención en particular, a la protección contra la corrosión a cualquier tubería subterránea. Si la tubería no se mantiene, puede ser sujeto a los potenciales peligros de fuga por la corrosión. Las tuberías deben ser inspeccionadas periódicamente para detectar fugas y o corrosión. Se deben realizar reparaciones si se descubren condiciones inseguras.

Llame al 811 dos días hábiles antes de excavar para alertar a los servicios públicos que localicen y marquen sus líneas subterráneas de la calle a su casa. El servicio es gratuito y no incluye localizar líneas subterráneas instaladas por el propietario que deben ser localizadas por un contratista privado. Excave a mano con precaución dentro de 24 pulgadas de las líneas marcada.



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