

RAILROAD COMMISSION OF TEXAS

PIPELINE SAFETY DIVISION

Damage Prevention Section

April Richardson

Texas Administrative Code (TAC), Title 16, Chapter 18, Underground Pipeline Damage Prevention.

- The Railroad Commission of Texas regulates and enforces the requirements of Chapter 18
- The rules are available for viewing and printing on the Commission website. For FREE

Commission's Responsibilities

- Have a record of all damages to pipelines caused by an excavator
- *Use the information gathered from these reports to determine how to prevent damages in the future.*
- *Correspond its findings to excavators and pipeline operators on reports filed.*
- Enforce violations of Chapter 18.

Chapter 18 Requirements

- Applies to all persons engaged in or preparing to engage in the movement of earth in the vicinity of an intrastate underground pipeline. *This does not include water, sewer, and other plumbing lines. The size of the pipeline does not determine its jurisdiction; pipelines include service lines unless they are on the customer side of the meter. It also does not matter if the excavation is taking place on private or public property.* §18.1(a)
- Comply with the requirements of Texas Utilities Code, Chapter 251. §18.1(b)
- Exemptions to Chapter 18 §18.1(d).
 1. Exemptions listed in Texas Utilities Code §251.003;
 2. The movement of earth that does not exceed a depth of 16-inches;
 3. Surface mining operations;
 4. Specific activities performed by an EMPLOYEE of TX-DOT within a TX-DOT ROW;
 5. Hand digging by an employee or contractor of TX-DOT for TX-DOT's ARCHEOLOGICAL PROGRAM

- Time periods are calculated from time of notification to notification center. §18.1(f)
- Days are working days, unless otherwise specified. §18.1(g)

Definitions

Operator – A person who operates on his or her own behalf, or as an agent designated by the owner, a pipeline containing flammable, toxic, or corrosive gas, a hazardous liquid, or carbon dioxide. (The pipeline company)

Damage:

- (A) defacing, scraping, displacement, penetration, destruction, or partial or complete severance of an underground pipeline or of any protective coating, housing, or other protective device of an underground pipeline;
- (B) weakening of structural or lateral support of an underground pipeline that affects the integrity of the pipeline; or
- (C) failure to properly replace the backfill surrounding an underground pipeline.

Excavate – Movement of earth by any means

White-lining – An excavator's designation on the ground of the area to be excavated using white paint, white flags, white stakes, or any combination of these.

Locate Ticket – The record of the notice of intent to excavate given by an excavator to the notification center...

Emergency – A situation that endangers life, health, or property or a situation in which the public need for uninterrupted service and immediate re-establishment of service if services are interrupted compel IMMEDIATE action.

Positive Response – Notification to an excavator by markings left at an excavation site, or an "All Clear" or "No Conflict" notice by fax, phone, e-mail or pager, or written correspondence.

Before You Call

- Use white-lining to mark the excavation site *when it cannot be clearly identified and described on a line locate ticket, prior to giving notice to the notification center and before the locator arrives on the excavation site.* §18.3(c)
- Use white paint, flags, or stakes, *whichever is most visible for the terrain.* §18.7(a)
- *Mark the area of excavation* using intervals that show the direction of the excavation §18.7(b)

Call Before You Dig

- Call a Notification Center prior to excavating. The excavation must begin within 14 days per TUC 251.151. §18.3(a)
- Include the method of positive response. §18.3(b)
- Wait the required time before beginning excavation. *(48-hours excluding weekends and legal holidays)* §18.4(b)

Your Locate Ticket

- Life of a locate ticket is 14 days. §18.1(h)
- The life of a line locate ticket may be extended *if an agreement is reached between the excavator and operator*. §18.3(f)
- The agreement *must be in writing, signed, dated, and retained by each party*. §18.3(f) and (g)
- A face-to-face meeting should be conducted *between the excavator and the pipeline operator to establish protocols if...* §18.3(d)
 - An excavation area is too large
 - A full description cannot be provided on a line locate ticket.
- The items to be included in the protocols *are found in* §18.9(a)
- It is recommended to be used on large projects *even if the description can be given on the locate ticket*.

Arriving On Site

- Confirm there is a valid locate ticket for that location. §18.4(c)
- Verify white-lining and make a visual check *for any unmarked underground pipelines. Checking for unmarked pipelines includes, but is not limited to, looking for additional pipeline markers, such as painted fence post-type markers, aboveground pipeline valves, meter sets, or regulator stations*. §18.4(d)
- Give a second notice to the notification center when: §18.4(e)
 - An “all clear” or “no conflict” response from an operator is incorrect, *such as when an excavator has knowledge of an underground pipeline or observes clear evidence of an unmarked underground pipeline*.
 - there is no positive response for the excavation area
 - or the positive response is unclear or obviously wrong

If a Second Notice Has Been Given

- And there is no positive response within four hours *the excavator may begin excavating with care*. §18.4(f)
- Give notice to the Commission *by filing a Second Notice Reporting Form* §18.5(c)

Positive Response Obligations

- Operator shall provide a positive response within 48 Hours, *excluding weekends and legal holidays, by either marking the underground pipelines or notifying the excavator that there are no pipelines in the vicinity. The operator will provide this “all clear” or “no conflict” notice using the method specified in the line locate ticket*. §18.5(a)
- *The excavator and operator shall make a record of the positive response for each line locate ticket received. At a minimum this should include the date, time, and type of response given*. §18.5(b)

Trouble Locates

- The pipeline operator shall notify the excavator *as soon as possible but within 48 hours that they are experiencing a trouble locate and arrange an agreed to time by which the pipeline shall be marked.*
- *Revise Agreement: If the locate cannot be made by the original agreed to time then the operator shall contact the excavator to revise the agreed to time before the originally agreed to time. The locates shall be made before the locate ticket expires.*
- All agreements shall be documented in writing. *Including the date and time the markings shall be made, the date and time the agreement was made, and the name of the representative making the agreement.*
- Call in a second notice *if the operator fails to locate the pipeline or fails to contact the excavator to make further arrangements by the agreed to time.*
- Excavation may begin within four hours of the second notice.

Markings

- *All markings shall conform to the requirements of American Public Works Association (APWA) Uniform Color Code §18.6(a)*
- *Markings are valid for an excavation site for 14 days from the time a positive response is given §18.6(b)*
- **Unless** emergency locates were requested. *When markings are placed in response to an emergency they are only valid until the emergency condition has ceased to exist. §18.6(b)*
- *When a refresh ticket is called in the operator shall either ensure that markings are still visible and valid or shall re-mark. §18.6(b)*
- *Underground pipelines shall be marked accurately. A locator shall use all information necessary to ensure markings are accurate. §18.8(a)*

Markings, cont.

- *Mark the approximate center line of the pipeline. §18.8(b)*
- *Means of marking include stakes, paint, flags, or a combination of two or more of these. The terrain, site conditions, and type and extent of the proposed excavation shall be considered in determining the best way to mark the underground pipelines. §18.8(e)*
- *Intervals: Locator shall mark in sufficient intervals to indicate the location and direction of the pipeline. The distance between any two marks shall not exceed 20 feet; however, shorter intervals may be necessary because of site conditions or directional changes. §18.8(f)*
- *Pipelines greater than 6-inches in nominal outside dimension shall have markings that include the size at every other interval. §18.8(g)*

*If an operator discovers a customer-owned line they shall make a reasonable effort to **advise** the excavator of the line. §18.8(c)*

Excavating in the Vicinity of a Pipeline

- *Comply with the requirements of Texas Health & Safety Code, Subchapter H, relating to Construction Affecting Pipeline Easements and Rights-of-Way. 18.10(a)*
- *Plan excavation to avoid damage to and minimize interference with all underground pipelines and take reasonable steps to protect pipelines from damage. §18.4(a)*
- *Protect and preserve locate markings from the time excavation begins until the markings are no longer required. If excavation activities are on going markings are required. If excavation activities remove markings and more excavation activities are on going the locates must be refreshed. §18.4(g)*
- *Refresh line locate tickets within 14 days for the area yet to be excavated only. The refresh ticket should be called in before the current locate ticket expires, while giving enough time for the 48-hour waiting period. Make sure that the ticket is adjusted to include only the area that will be excavated within 14 days. §18.3(e)*

Excavating Within the Tolerance Zone

- Tolerance Zone is defined as: Half the nominal diameter of the underground pipeline plus a minimum of 18-inches on either side of the outside edge of the underground pipeline on a horizontal plane. *Horizontal plane is included in the definition to eliminate measuring at an angle.* §18.2(21)
- Mechanized Equipment is not allowed within the tolerance zone *unless approved by the pipeline operator. The tolerance zone begins at the top of the material being moved and extends downward to the deepest point of excavation.* §18.10(b)
- With the exception of pavement removal.
- If a pipeline is discovered, during excavation, *it does not allow the use of mechanized equipment in the tolerance zone. The pipeline that has been discovered could be an abandoned facility or there could be more than one pipeline within the tolerance zone.*

If Damages Occur

- Call 911 if an emergency exists. *Not required by Chapter 18.*
- Excavator calls the pipeline operator immediately. *The Texas Utility Code, Chapter 251 requires that the operator be notified of damages directly not Chapter 18.*
- Excavator calls the notification center *as soon as possible within two hours and receives a "Dig Up" ticket. This not only gives notice to the pipeline operator, but also lets all other utilities with facilities in the area that emergency excavation is necessary.* §18.11(b) and §18.4(h)
- Leave the damage exposed *unless approved by the operator. One reason that the damage needs to be left exposed is to prevent the migration of any leaking gas into buildings, homes, other utility lines, etc. This can result in the migrated gas being exposed to an ignition source causing a fire and/or explosion.* §18.4(h)
- Operator responds within four hours of "Dig Up" notice §18.5(d)
- Incident Information Card - The operator may provide the excavator with one of these to keep consistent information
- Report damages through TDRF within 10 days. §18.11(a) and §18.11(b)

Gathering information at a damage site

Document in writing and with *pictures when possible

- Date
- Location*
- Contact Information for pipeline operator/excavator
- Damage depth* (Depth at which the pipe was damaged) *For example if a pipeline is hit with a backhoe at 12", but the line breaks at 16" then you would want to use 16", but document both especially if any damage occurred at the point of contact, which is likely.*
- Markings in vicinity of damage.*
- Markings with an object of reference in view* (*I.e. mailbox, building, intersection, landscape, etc.*)
- If marks are inaccurate the distance they are miss-marked*
- White-lining, *especially of white-lining is listed on the locate ticket.**
- Damaged pipe*
- Type of equipment in use when damage occurred*

ONLINE SYSTEM
Texas Damage Reporting Form (TDRF)

TDRF Main | About | TDRF Help

Excavator Report

Reference Number: 47431
Status: Work in Progress

• Save Successful.

You should see Save Successful and a message box will appear noting the importance of the Document Key. The Commission cannot retrieve the document key for a report you created.

Search | Back to List | Page One | Print View | Print Invoice

Note: You must complete all information before proceeding to the next page. Please make note of the Document Key displayed on the screen. You will need to enter this key to access your report. Without this key, all information will need to be re-entered.

Document Key 4X83ZTT

Incident Information
Incident Number: 34880

Once the document key has been issued the report may be updated and saved as many times as necessary to complete the information until it has been submitted. Once submitted an excavator cannot make changes to their report; however operators do not receive a document key and may update their report until it has been reviewed by the Commission.

3. After recording the document key and incident # click OK on the message box. Then click on the page 2 tab. Complete page 2 & Save. Then click on the page 3 tab. Once you have completed page 3 save the report. If you have entered all of the information then click the submit button. Once a report has been submitted a confirmation report is created and may be saved and/or printed for your records. If you do not see the link for the confirmation report then you have not successfully submitted your report. The cover sheet of the confirmation report can be used to submit any documentation you wish to submit to the Commission regarding the incident.

Correspondence from the Commission

- TDRF not filed within 30 days of the incident - *then the Commission will send a letter to file the report.*
- TDRF not filed within 30 days of the first letter - *then the Commission will send a final notice letter.*
- TDRF not filed within 30 days of the final notice - *then the Commission will issue a violation and subsequent penalty.*
- Once a report has been filed *with the Commission it will be reviewed. The reviewer may close the report and send a letter, send a letter asking for more information, or cite violations and possibly issue a penalty.*

Steps to Excavating Safely

- Call for a line locate ticket. *The ticket should include the scope of work to be performed, the method of positive response, subcontractor's name, if applicable, and date excavation is to begin.*
- Wait the required time. *48 Hours excluding weekends and legal holidays.*
- Verify locate ticket at excavation site. *This includes verifying that line markings are present or the operator has sent a positive response.*
- Respect the marks. *Do not use mechanized equipment within the tolerance zone, unless approved by the pipeline operator.*
- Dig with care
- Refresh locate ticket as necessary. *Locate tickets are valid for 14 days and need to be called in to allow the 48 hours required.*

Contact Information

April Richardson, (512) 463-2339
april.richardson@rrc.state.tx.us



Main Line (512) 475-0512
fax (512) 463-7153
TDRFInfo@rrc.state.tx.us

Chairman Victor G. Carrillo
Commissioner Elizabeth Ames Jones
Commissioner Michael L. Williams

Railroad Commission of Texas
www.rrc.state.tx.us

DIG SAFELY
1-800-545-6005

Damage Prevention
Deputy Director
Kendall Smith