



Description This procedure is used to conduct gas leak surveys.

Regulatory Applicability All DOT regulated gas lines that are not odorized.
 Regulated Transmission Pipelines
 Regulated Gathering Pipelines
 Regulated Distribution Pipelines

Frequency Note: in the state of Texas - when leak detection surveys are used to determine areas of active corrosion or re-evaluate unprotected pipelines, the survey frequency must be increased to monitor the corrosion rate and control the condition. The detection equipment used must have sensitivity adequate to detect gas concentration below the lower explosive limit and be suitable for such use.

Gas Transmission Lines

Class Location	Odorized Gas	Non-Odorized Gas
1 & 2	Once each year, not to exceed 15 months	Once each year, not to exceed 15 months
3	Twice each year, not to Exceed 7½ months* for pipeline segments that are not CP protected the frequency requirement is increased to Quarterly	Twice each year, not to Exceed 7½ months*, for pipeline segments that are not CP protected the frequency requirement is increased to Quarterly.
4	Twice each year, not to Exceed 7½ months for pipeline segments that are not CP protected the frequency requirement is increased to Quarterly	Four times each year, not to Exceed 4½ months*

*A leak detector must be used for these surveys.

Leak detection equipment must be used to conduct all leakage surveys on transmission lines in the State of New Mexico.



Gas Distribution Systems (Outside the State of Texas)

Leakage surveys with leak detector equipment:

Town Plant Distribution Systems	Intervals not exceeding 15 months, but at least once per calendar year
Rural Distribution Systems	As necessary, but at intervals not exceeding 5 years (3 years for lines subject to 192.465(e) where electrical surveys for corrosion are impractical).

**Frequency
(Cont'd)**

Gas Distribution Systems (Texas)

Leakage surveys with leak detector equipment:

In business districts	Intervals not exceeding 15 months, but at least once per calendar year
Polyethylene systems or segments within a system outside business districts	Intervals not exceeding 5 years
All other non-business district cathodically protected steel systems or segments within a system	Intervals not exceeding 3 years
All other non-business district systems or segments within a system.	Intervals not exceeding 2 years

As needed to help determine location of potential leaks and when performing repairs on the pipeline.

Reference

- 49 CFR 192.706 *Transmission Lines: Leakage Surveys*
- 49 CFR 192.723 *Distribution Systems: Leakage Surveys*
- 49 CFR 192.935 *What Additional Preventive and Mitigative Measures Must an Operator Take?*
- 49 CFR 192.9 *What Requirements Apply to Gathering Pipelines?*
- 16 TAC Rule 8.203 *Supplemental Regulations*



16 TAC Rule 8.206	Risk Based Leak Survey Program
16 TAC Rule 8.207	Leak Grading and Repair
NM 18.60.2.8(B)(2)	<i>Adoption of Portions of the Code of Federal Regulations</i>
NM 18.60,2,12	<i>Classification and Repair of Leaks</i>

**Forms / Record
Retention**

F-192.706	Leakage Survey / 5 Years
F-192.706(a)	Aerial Leakage Survey / 5 Years
WTG 1101	Leak Report Form / Life of Pipeline System

**Related
Specifications**

None

**OQ Covered
Task**

1311	<i>Inspect Pipeline Surface Conditions – Patrol Right – of – Way or Easement</i>
1261	<i>Walking Gas Leakage Survey</i>
1271	<i>Mobile Gas Leakage Survey</i>
1281	<i>Mobile Gas Leakage Survey</i>

(In order to perform the tasks listed above; personnel must be qualified in accordance with West Texas Gas’s Operator Qualification program or directly supervised by a qualified individual.)



Procedure Steps

Leakage surveys will be accomplished by using either vegetation surveys or surveys using approved leak detection instrumentation. Approved instrumentation includes but is not limited to Flame Ionization or Laser Optical leak detection equipment either portable or mobile, with enough sensitivity to detect small leaks. The District Manager will ensure that all employees are qualified through WTG's approved Operator Qualification Program prior to conducting leak surveys.

The use of leak survey instrumentation is required for the following:

Transmission:

1. For transmission pipelines, the use of gas detection instrumentation is required when:
 - a) Surveying Class 3 and 4 areas
 - b) Conducting leak surveys at highway and railroad crossings
2. Vegetation surveys may be conducted when performing a leakage survey in Class 1 and Class 2 pipeline locations that are not located at highways and railroad crossings.

Distribution:

Gas detection instrumentation will be used for all distribution leakage surveys.

1. Traverse the pipeline for indication of a leak.
 - a) Visual indications include but are not limited to: dead vegetation, blowing dirt, bubbling water and frost spots.
 - b) In areas where the piping is located under a hard surface or pavement which would deter leaking gas from surfacing, the survey shall include investigation of cracks in the pavement and sidewalk, manholes, valve boxes, and other locations which may provide an opportunity for detecting leaks. If sufficient openings are not available, those available may be supplemented with additional test holes.
 - c) Refer to manufacturer's procedure for operating leak detection instrumentation.
2. Classify leak according to the tables found in 192.706(b). Immediately report Class 1 leaks to District Manager for remediation.
3. In the event of a leak found during a leak survey complete form WTG 1101 using terminology from Appendix A of procedure P-192.706(b): Leak Reporting. Forward this form to appropriate WTG personnel for entering into the Leak Tracking System.
4. Complete Form F 192.706 forward a copy of the form to appropriate WTG personnel to be entered into the Leak Tracking System.
5. Annually the transmission pipeline specialist and distribution pipeline specialist will review LTS entries to determine if any segment is leak prone. These reviews will be documented



on the annual integrity management reports. Additionally, Remedial actions projects will be developed and proposed to senior management by the appropriate specialist as needed.

- a) A leak prone pipeline could be multiple leaks on a segment due to the same leak cause with like pipe specifications (i.e. material, grade, wall thickness, seam type, etc.).

Gathering:

All gathering pipelines will adhere to the above-mentioned requirements for transmission leakage surveys.

Exceptions

Leakage surveys are not required for Type C gathering pipelines with an outside diameter of 16 inches or less if;

1. The pipeline does not fall within a potential impact circle that includes a building designated for human occupancy or another affected site. (When calculating the PIC, please utilize a factor of 0.73 instead of 0.69.)
2. The pipeline segment does not traverse a class location that includes a building designated for human occupancy or another affected site.