



SOUTHERN CROSS

Trusted Partners of Utilities Everywhere

Utility Inspection Services
1-800-241-5057

3175 Corners North Court Peachtree Corners, GA 30071
www.southerncrossinc.com



GRADE 1

GPTC Leak Grading Guidelines

Definition:

A leak that represents an existing or probably hazard to persons or property, and requires immediate repair or continuous action until conditions are no longer hazardous.

Action Criteria:

Requires prompt action to protect life and property, and continuous action until the conditions are no longer hazardous.

This prompt action may require one or more of the following:

- Implementation of emergency plan.
- Evacuating premises.
- Blocking off an area.
- Rerouting traffic.
- Eliminating sources of ignition.
- Venting the area by removing manhole covers, barholing, installing vent holes, or other means.
- Stopping the flow of gas by closing valves or other means.
- Notifying police and fire departments.

Examples:

1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard.
2. Escaping gas that has ignited.
3. Any indication of gas which has migrated into or under a building, or into a tunnel.
4. Any reading at the outside wall of a building or where gas would likely migrate to an outside wall of a building.
5. Any reading of 80% LEL, or greater, in a confined space.
6. Any reading of 80% LEL, or greater, in small substructures (other than gas associated substructures) from which gas would likely migrate to the outside of a building.
7. Any leak that can be seen, heard, or felt, and which is a location that may endanger the general public or property.

GRADE 2

GPTC Leak Grading Guidelines

Definition:

A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard.

Action Criteria:

Leaks should be repaired or cleared within 1 calendar year, but no later than 15 months from the date the leak was reported. In determining the repair priority, criteria such as the following should be considered:

- A. Amount and migration of gas.
- B. Proximity of gas to buildings and subsurface structures.
- C. Extent of pavement.
- D. Soil type, and soil conditions, such as frost cap, moisture and natural venting.

Grade 2 leaks should be reevaluated at least once every six months until cleared. The frequency of reevaluation should be determined by the location and magnitude of the leakage condition.

Grade 2 leaks may vary greatly in degree of potential hazard. Some Grade 2 leaks, when evaluated by the above criteria, may justify scheduled repair within the next 5 working days. Others will justify repair within 30 days. During the working day on which the leak is discovered, these situations should be brought to the attention of the individual responsible for scheduling leak repair.

On the other hand, many Grade 2 leaks, because of their location and magnitude, can be scheduled for repair on a normal routine basis with periodic re-inspections as necessary.

Examples:

A: Leaks Requiring Action Ahead of Ground Freezing or Other Adverse Changes in Venting Conditions.
Any leak which, under frozen or other adverse soil conditions, would likely migrate to the outside wall of a building.

B: Leaks Requiring Action within 6 months

1. Any reading of 40% LEL, or greater, under a sidewalk in a wall-to-wall paved area that does not qualify as a Grade 1 leak.
2. Any reading of 100% LEL, or greater, under a street in a wall-to-wall paved area that has significant gas migration and does not qualify as a Grade 1 leak.
3. Any reading less than 80% LEL in small substructures (other than gas associated substructures) from which gas would likely migrate creating a probable future hazard.
4. Any reading between 20% LEL and 80% LEL in a confined space.
5. Any reading on a pipeline operating at 30% SMYS, or greater in a class 3 or 4 location, which does not qualify as Grade 1 leak.
6. Any reading of 80% LEL, or greater, in gas associated substructures.
7. Any leak which, in the judgment of operating personnel at the scene, is of sufficient magnitude to justify scheduled repair.



GRADE 3

GPTC Leak Grading Guidelines

Definition:

A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous.

Action Criteria:

These leaks should be reevaluated during the next scheduled survey, or within 15 months of the date reported, whichever occurs first, until the leak is regraded or no longer results in a reading.

Examples:

Leaks Requiring Reevaluation at Periodic Intervals:

1. Any reading of less than 80% LEL in small gas associated substructures.
2. Any reading under a street in areas without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building.
3. Any reading of less than 20% LEL in a confined space.



LEL	Gas	PPM
100% LEL	5% Gas	50,000 PPM
80% LEL	4% Gas	40,000 PPM
60% LEL	3% Gas	30,000 PPM
50% LEL	2.5% Gas	25,000 PPM
40% LEL	2% Gas	20,000 PPM
20% LEL	1% Gas	10,000 PPM