

# Glossary

## Definition of Terms

---

### **Bell Hole**

A bell hole is any hole other than a continuous trench opened for working on a buried pipeline. A bell hole can be used to uncover sections of pipeline that might be suspect in order to x-ray and apply ultrasonic inspection tools to detect thinning of the pipeline walls.

### **Cathodic Protection**

All buried transmission pipe and other jurisdictional pipe in the El Paso Pipeline Group's system is encircled by a low-level electric current. This method of protection from external corrosion helps guard against the erosive properties of soil. In effect, the surface of the pipeline acts as the cathode (the negative electrode) of an electrochemical cell.

### **Coupons**

Coupons are pre-weighed strips of metal made of the same material as the pipeline. Coupons are inserted into the pipeline and later removed, inspected, and weighed again to determine any loss of metal due to corrosion. Department of Transportation regulations stipulate that the coupons must be weighed every six months. From this data, an extrapolation of the estimated wall loss can be made for the pipeline system. Once this rate has been determined, chemical inhibitors can be used to limit further corrosion. This procedure is used most commonly on gas systems that transport field or unprocessed gas containing corrosive compounds or water.

### **Field or Unprocessed Gas**

Gas from a producing well is referred to as "field" or "unprocessed gas." This gas contains contaminants such as water, liquids, and other impurities that may cause internal corrosion in a pipeline. Field gas must be treated and purified before it is considered pipeline quality and fit for transportation.

### **Gas Compression**

Natural gas is compressed for transmission at intervals along a pipeline system. The gas flows by expanding in the transmission pipe from the discharge, high-pressure side of one compressor station toward the suction, low-pressure side of the next. Gas compression also minimizes the size and cost of the pipe required to transport the gas.

### **Gas Gathering**

A gas gathering pipeline transports field gas from a producing well to a treating plant.

### **Gas Processing**

Field gas is treated in a processing plant before entering a transmission pipeline. Processing removes revenue-generating products such as natural gas liquids and helium from the gas stream.

### **Gas Quality Data**

To monitor and maintain gas quality, liquid and gas sampling is conducted routinely at points where gas enters a pipeline system. This helps prevent gas with an unacceptable amount of water or impurities from entering the pipeline system, where it could cause internal corrosion.

### **Gas Treating**

Gas treating removes impurities from the gas stream to make it pipeline quality.

### **Hydrostatic testing**

Hydrostatic testing can be used to verify the current strength of a pipeline segment. The segment is filled with water and pressurized to a level well in excess of the expected operating level to identify possible weaknesses in the pipe.

### **Liquefied Natural Gas (LNG)**

Natural gas that has been cooled to –259 degrees Fahrenheit condenses to a liquid known as “liquefied natural gas” or LNG. In its liquefied form, natural gas takes up only 1/600 of its gaseous volume, making it ideal for long transport.

### **Pipeline Pigs**

A pipeline pig is a device used to clean and inspect the inside of gas transmission pipelines. “Smart pigs” use on-board computers for a more accurate diagnosis of a pipeline’s interior. Pigs can investigate significant pipeline characteristics such as sizing, wall thickness, internal corrosion, and some anomalies, although smart pigging technology has not evolved sufficiently to reveal all possible internal and external problems. Each smart pig has a different function, so one pig will not look for all problems in a single run, requiring multiple runs with different smart pigs to get a more complete picture of the pipeline’s integrity.

### **Pipeline Quality Gas**

Natural gas that has been treated to meet the specifications of a pipeline purchase contract is called pipeline quality gas. This gas has been processed to remove contaminating water, liquids, and other impurities.

### **Receipt Points**

Points in a pipeline system where gas enters the system are referred to as receipt points. Gas quality is tested routinely at receipt points to ensure that the entering gas is pipeline quality.

### **Tariff**

Pipeline companies set tariffs, which are schedules detailing terms, conditions, and rate information applicable to various types of natural gas service. Schedules are filed with and approved by the Federal Energy Regulatory Commission (FERC) or a state regulatory body.

### **Tariff Limit**

Tariff limits, also called quality specifications, are the acceptable tariff ranges allowed for pipeline quality gas. The amount of permissible water in the gas stream is an example of a tariff limit.