Description

To ensure prior to transporting corrosive gas in the pipeline, the corrosive effect of the gas on the pipeline is investigated and steps are taken to minimize internal corrosion.

Note: In the state of Texas: Corrosive gas" means a gas which, by chemical reaction with the pipe to which it is exposed, usually metal, produces a deterioration of the material."

Regulatory Applicability

☒ Regulated Transmission Pipelines
☒ Regulated Gathering Pipelines (Type A)
☒ Regulated Gathering Pipelines (Type B)
☒ Regulated Distribution Pipelines

Frequency

As needed to determine the corrosiveness of the commodity being carried. Monitoring twice per year, but no more than 7 ½ months part.

Reference

49 CFR 192.475	*Internal Corrosion Control: General*
49 CFR 192.476	*Internal corrosion control: Design and construction of transmission line*
16 TAC Rule 8.203	**Supplemental Regulations**
LA Title 43 Part XIII 2127	*Internal Corrosion Control: General*
LA Title 43 Part XIII 2128	*Internal corrosion control: Design and construction of transmission line*

Forms / Record Retention

None / Life of Pipeline System

Related Specifications

None

OQ Covered Task	1021	Apply or Repair Internal Coating Other Than by Brushing, Rolling or Spraying

(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

1. If it can be determined from the MSDS or specification sheet that the gas is not corrosive, file documentation in the DOT files.
2. If necessary to determine the corrosiveness of the gas take a sample for analysis:
   a) Locate Sample Site: Locate sample site, either for a sample container for a composite or a sample tap for a spot sample.
   b) Check Atmospheric Conditions: Fire extinguisher operation. Utilize an appropriate air monitoring device to test for explosive or hazardous conditions.
   c) Prepare Sample Container: Sample container must meet the requirements established by the company and/or analyzing laboratory. The sample container must also meet the Department of Transportations requirements for shipment of hazardous materials.
   d) Collect Sample: Sample shall be collected according to industry approved practices.
3. Label the sample with the following information:
   a) Company name
   b) Facility/location
   c) Product name
   d) Date/Time
   e) Temperature of sample
   f) Operator name
   g) Sample type (i.e. composite, grab or spot)
   h) Package labeling must also meet all DOT requirements
4. Analyze the sample in company lab or ship to an appropriate lab for analysis.
5. Once report is received, have corrosion engineer determine if the sample is corrosive and if so what measures need to be taken to protect the pipe, including appropriate monitoring measures as described in procedure P-192.477.
6. File lab report and engineering analysis in DOT files.

Internal corrosion control: Design and construction of transmission line

Design and construction.

Except as provided in below, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line will have features incorporated into its design and construction to reduce the risk of internal corrosion. At a minimum, unless it is impracticable or unnecessary to do so, each new transmission line or replacement of line pipe, valve, fitting, or other line component in a transmission line will:

(1) Be configured to reduce the risk that liquids will collect in the line;
(2) Have effective liquid removal features whenever the configuration would allow liquids to collect; and
(3) Allow use of devices for monitoring internal corrosion at locations with significant potential for internal corrosion.

The design and construction requirements do not apply to the following:

(1) Offshore pipeline; and
(2) Pipeline installed or line pipe, valve, fitting or other line component replaced before May 23, 2007.

Change to existing transmission line.

When the configuration of a transmission line changes, WTG will evaluate the impact of the change on internal corrosion risk to the downstream portion of an existing onshore transmission line and provide for removal of liquids and monitoring of internal corrosion as appropriate.

Records.

WTG will maintain records demonstrating compliance with this section. Provided the records show why incorporating design features are impracticable or unnecessary, WTG may fulfill this requirement through written procedures supported by as-built drawings or other construction records.