

**MASTER METER  
DISTRIBUTION INTEGRITY MANAGEMENT PLAN**

*FACILITY NAME*

*FACILITY ADDRESS*

**DEFINITIONS:**

**Building:** Any structure intended for supporting or sheltering any occupancy.

**Excavation Damage:** Any impact that results in the need to repair or replace an underground facility due to a weakening or the partial or complete destruction of the facility, including but not limited to the protective coating, lateral support, cathodic protection, or the housing for the line device or facility.

**Hazardous Leak:** A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

**Non-hazardous Leak:** Any above ground leak, other than one on a pressure regulator or relief device, that poses no existing or probable threat to life, property, or health and that can be eliminated by maintenance such as lubrication, adjustment, tightening, or reassembling of any pipe or component and does not require the shutting down of any part of the distribution system (main or service line) upstream of a service line valve in order to complete the repair.

**KNOWLEDGE OF THE DISTRIBUTION SYSTEM:**

This plan was developed based on the design, construction, operation and maintenance records, including but not limited to: INCIDENT and LEAK HISTORY, CORROSION CONTROL RECORDS, CONTINUING SURVEILLANCE RECORDS, PATROLLING RECORDS, MAINTENANCE HISTORY, and EXCAVATION DAMAGE EXPERIENCE, as well as the JUDGEMENT and KNOWLEDGE of our employees. In the event that it becomes known that there is a gap in information due to missing, inaccurate, or incomplete records we will review for accuracy the applicable Annual Reports or evaluation reports that are maintained as a public record with the Railroad Commission of Texas, Pipeline Safety Department and gain additional knowledge over time through our normal activities conducted on the pipeline (i.e., design, construction, operations, maintenance, and/or repair activities).

This plan will be reviewed at a minimum of every 5 years for the purpose of continually refining and improving this plan.

Records for all piping systems or segments installed after the effective date of this plan shall be captured and retained. This will include the date and location where all new and/or repaired piping and appurtenances are installed and the material of which they are constructed.

**DISTRIBUTION SYSTEM OVERVIEW:**

The Distribution System consists of the following:		A total of	feet of pipe.
Type of Material	Ft. Above Ground	Ft. Below Ground	Total Feet
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**PLAN IMPLEMENTATION:**

Implementation of the required actions listed in this plan will be the responsibility of:

*(Title Only)*

and / or

*(Title Only)*

**IDENTIFICATION OF THREATS:**

We have used all reasonably available information to identify existing and potential threats on our Master Meter System including:

- Corrosion (external, internal, and atmospheric)
- Natural Forces (flooding, fire, soil subsidence or movement, snow/ice damage)
- Excavation Damage
- Other Outside Force Damage (vehicular damage, trailer pull-out)
- Material or Weld Failure (including fusion, solvent, and mechanical joining failures)
- Equipment Failure
- Incorrect Operation
- Other Threats

**RISK RANKING:**

The risk ranks for each identified threat is based on the piping material and leak history from the previous 5 years at our facility.

**CONSEQUENCE RANKING:**

The Railroad Commission of Texas has prioritized all regulated Master Meter Systems in the State of Texas based on the following criteria:

- **All Priority One (1) Facilities** (regulated: schools, churches, hospitals, day care centers, prisons) will be assigned a consequence number of 1.25 due to these locations being more difficult to safely evacuate in the event of an emergency.
- **All Priority Two (2) Facilities** (regulated: master meter apartments, mobile home parks, businesses/industrial plants, etc.) will be assigned a consequence number of 1.00 since these facilities are easier to evacuate in the event of an emergency.

<b>Our facility is a Priority</b>		<b>which will have a consequence rating of</b>		.
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Numerous variables have been taken into consideration and it has been determined that any risk would have system-wide consequences.

**THREAT ASSESSMENT:**

Our threat assessment will identify those threats needing possible further consideration of additional actions based on the probability of each threat using the following criteria:

- **0** (low risk)
- **1** (moderately low risk)
- **2** (medium risk)
- **3** (high risk)

**THREAT CATEGORY CHART** (check each "yes" box that applies).

Threat Category	Piping Type	DISCRIPTION OF THREAT	Threat Probability Score	YES
Leak Failure	All	Five (5) or more leaks in the previous (5) years of any cause.	3	
Other Threats	All	Unknown: pipe material, fittings, joints, equipment, history.	3	
Corrosion	Underground Steel	No underground leaks in the previous five years <b>AND</b> all annual CP survey readings have met the minimum criteria for the previous five years.	1	
Corrosion	Underground Steel	At least one (1) but less than five (5) underground leaks in the previous five years <b>OR</b> annual CP survey readings have not met the minimum criteria and required remedial action.	2	
Corrosion	Aboveground Steel	No leaks in the previous five years.	0	
Corrosion	Aboveground Steel	At least one (1) but less than five (5) leaks in the previous five years.	1	
Internal Corrosion	All	No indications in the previous five years.	0	
Internal Corrosion	All	Any indications in the previous five years.	1	
Material Failure	PVC Plastic	All underground PVC plastic, regardless of age or leak history.	2	
Material Failure	PE Plastic	No underground leaks in the previous five years.	0	
Material Failure	PE Plastic	At least one underground leak in the previous five years.	2	
Material Failure	PE Plastic	No underground leaks in the previous five years <b>AND</b> system has mechanical joints.	1	
Material Failure	PE Plastic	At least one (1) but less than five (5) underground leaks in the previous five years <b>AND</b> system has mechanical joints.	2	
Excavation	All Underground	Any excavation damages to piping in the previous five years, regardless of material type.	2	
Excavation	All Underground	No excavation damages on the piping system in the previous five years.	1	
Natural Forces	All Aboveground	Areas where natural forces have caused damage or leaks in the previous five years. (e.g., Snow accumulation, flooding, lightening strikes, soil subsidence, etc.).	1	
Natural Forces	All Aboveground	All other areas where natural forces have not caused damage or leaks in the previous five years.	0	
Other Outside Forces	All Aboveground	No damages or leaks caused by outside forces in the previous five years.	1	
Other Outside Forces	All Aboveground	At least one (1) but less than five (5) leaks and/or damage caused by outside force in the previous five years.	2	
Equipment Failure	All Aboveground	No leaks in the previous five years.	1	
Equipment Failure	All Aboveground	At least one (1) but less than five (5) leaks in the previous five years where defective equipment was replaced or repaired.	2	
Incorrect Operations	All	No incidents in the previous five years.	0	
Incorrect Operations	All	Any incorrect operation that resulted in a State Reportable Incident as defined in our Emergency Plan.	2	
Other Threats	All	Incident where emergency event resulted in a State Reportable Incident as defined within our Emergency Plan.	1	

**FACILITY THREAT SCORE**

The total threat score for our pipeline facility is a total of all the categories checked "yes".

Threat Score

The total threat score was calculated on the following date:

Date

**OVERALL RISK RANKING:**

The overall risk ranking is determined by the following steps:

- Take the total threat score that you determined from the threat assessment chart and multiply the threat score by the consequence score (1.25 for Priority 1 ; 1.00 for Priority 2).
- Then divide the number determined in the step above by the total number of threat categories identified that were checked (number of categories checked "yes" in the threat assessment chart.) This is your overall risk score for your system.

**Probability** is the total threat score derived from the Threat Assessment Chart.

**Consequence** is based on the priority number given by the Railroad Commission of Texas.

**Risks** are all system wide and we have validated the results of the threat assessment and risk evaluation.

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<u>Probability</u>		<u>Consequence</u>		<u>Number of Categories</u>		<u>Risk Rank Score</u>	<u>DATE</u>

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<u>Probability</u>		<u>Consequence</u>		<u>Number of Categories</u>		<u>Risk Rank Score</u>	<u>DATE</u>

**BASED ON THE OVERALL RISK RANKING SCORE THE FOLLOWING ACTIONS WILL BE TAKEN:**

- **Risk Score that is less than or equal to 1.5:**  
Monitor system; no additional actions required.
- **Risk Score is greater than 1.5 but less than 2.5:**  
Identify threat, periodically monitor, plan, and schedule remedial action to be taken in order to mitigate the risk(s) and provide a written plan to the Railroad Commission of Texas, Pipeline Safety Department within 30 days for approval.
- **Risk Score is 2.5 or greater:**  
Identify threat, continuously monitor, plan, and schedule remedial action to be taken in order to mitigate the risk(s) and provide a written plan to the Railroad Commission of Texas, Pipeline Safety Department within 30 days for approval.

**MANDATORY AND RISK BASED ADDITIONAL ACTIONS GENERAL:**

To reduce risk of the threats identified by our threat assessment the following additional actions that are above and beyond the minimum requirements of 49 CFR 192 shall be implemented.

- Leak Surveys shall be conducted once each calendar year not exceeding 15 months.
- Odorant Sniff Tests shall be conducted four (4) times a year and on a quarterly basis.
- Minimum criteria that will be used for determining adequate cathodic protection is -.850 volts.
- New Construction and Repair of pipe mains and services shall be reviewed by the Railroad Commission of Texas, Pipeline Safety Department as necessary.
- System Mapping shall be maintained for the life of the system.
- All underground hazardous leaks shall be repaired immediately upon discovery and records retained.
- All other leaks shall either be repaired upon discovery or classified and scheduled for repair in accordance with the Texas Administrative Code, Title 16, Part 1, Chapter 8, Subchapter C, Rule 8.207.
- Underground pipelines discovered under a "building" (as defined by this plan) shall be relocated or gas service will be discontinued or the building shall be relocated/disassembled. New pipelines shall not be installed under any building.
- All plastic piping shall be installed with a minimum 14 gauge coated and conductive tracer wire.
- All pipelines shall be installed with six (6) inches of sandy type bedding and shading to reduce damages to pipelines and pipe coating.
- The Railroad Commission of Texas, Pipeline Safety Department shall be notified at least thirty (30) days prior to any construction on the pipeline system and shall be provided with copies of all construction plans for their review.
- All failures shall be investigated to determine their cause and to prevent a recurrence. If the cause of any failure cannot be determined, laboratory testing shall be conducted in accordance with 49 CFR 192.

**MANDATORY PERFORMANCE MEASURES:**

We will monitor and record, as a performance measure, the number of leaks eliminated and / or repaired on our pipeline system and the cause of each leak.

## **PERIODIC EVALUATION AND IMPROVEMENT:**

Re-evaluation of this Plan shall occur anytime that there are events or changes to the pipeline system that may change the identified risks of failure.

A complete re-evaluation of this Plan will be conducted no less than every five (5) years. Trends in each of the performance measures listed in the previous section will be reviewed during the re-evaluation. If any performance measure is found to indicate that any of the additional actions taken is/are not effective in reducing the risk it is intended to address we will consider implementing additional actions to address that risk.

Any changes to this plan will be made available to appropriate operator personnel immediately and a copy submitted to the Railroad Commission of Texas within thirty (30) days of the updated plan's effective date.

## **RECORD KEEPING:**

The following records must be maintained or a minimum of ten (10) years.

- This Plan including any superseding plans.
- Copies of previous written DIM plans.
- Records of data required to be collected in order to calculate performance measures.
- Records necessary to show implementation and compliance of this Plan.
- Records for all piping systems installed after the effective date of this plan, including the date and location where all new and / or repaired piping and appurtenances are installed and the material of which they are constructed.