

Unitil Distribution Integrity Management Plan Summary

The US. Department of Transportation ("DOT") through the Pipeline and Hazardous Materials Safety Administration requires natural gas distribution operators to implement a Distribution Integrity Management Program ("DIMP") as prescribed by 49 CFR 192 Subpart P.

The difference between distribution operators necessitated a different approach to integrity management than those required for transmission operators. DIMP was established to provide a high-level flexible program to account for these differences and still ensure safety. The gas distribution Integrity Management regulations require natural gas distribution operators to develop, write, and implement an integrity management program.

To meet these federal regulations, Unitil has developed a written plan in accordance to the seven required elements which include the following:

- 1. **Knowledge Demonstrate an understanding of the gas distribution system:**Unitil uses its DIMP plan to show understanding of its distribution system by including the characteristics and the environmental factors necessary to assess the applicable threats and risks to our gas distribution system. Unitil also identifies additional information needed to improve and better identify risks to the system and ways to gain that information over time through normal activities.
- 2. **Identify Threats:** Unitil, as directed by the regulation, considers the following categories of threats to each of their gas distribution pipeline:
  - a. corrosion,
  - b. natural forces,
  - c. excavation damage,
  - d. other outside force damage,
  - e. material or weld failure,
  - f. equipment malfunction,
  - g. the inappropriate operation, and
  - h. any other concerns that could threaten the integrity of the pipeline.

Unitil considers incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and "one call" and excavation damage experience to identify existing and potential threats.

3. **Evaluate and Rank Risk**: to fulfill this criterial, Unitil determines the relative probability of each threat and estimates and prioritizes the risks posed to the

- pipeline system. In doing this Unitil considers current and potential threats, the likelihood of each threat and the potential consequences should a failure occur.
- 4. **Identify and implement measures to address risks**: Once risks are identified, mitigating measures are identified, and procedures are developed and implemented to reduce the risks from a failure of our gas distribution pipeline system. Unitil has worked to go above and beyond the minimum requirement of having an effective leak management program and enhancing the current damage prevention program.
- 5. **Measure performance, monitor results, and evaluate effectiveness:** Unitil has developed and continues to monitor performance measures from our established baseline to evaluate the effectiveness of our DIMP program. In doing this Unitil considers the results of its performance monitoring in periodically re-evaluating the threats and risks. Unitil looks at a number of performance measures, including the following:
  - a. Number of hazardous leaks either eliminated or repaired, categorized by cause;
  - b. Number of excavation damages (Damage means any impact or exposure resulting in the repair or replacement of an underground facility, related appurtenance, or materials supporting the pipeline);
  - c. Number of excavation tickets (a receipt of information by the underground facility operator from the notification center);
  - d. Number of Excess Flow Valves installed;
  - e. Total number of leaks either eliminated or repaired, categorized by cause;
  - f. Number of hazardous leaks either eliminated or repaired, categorized by the material; and
  - g. Any additional measures to evaluate the effectiveness of the Unitil's program in controlling each identified threat. The first four measures must be reported to PHMSA and to the State pipeline safety authority in the State where the gas distribution pipeline is located as part of the annual distribution report.
- 6. **Periodic Evaluation and Improvement:** Unitil continually re-evaluates threats and risks on its entire system and considers the relevance of threats in one location to other areas. The re-evaluation includes periodically evaluating the effectiveness of the program to assure performance including reassessing the contribution of human error to risk and identifying opportunities to intervene via training procedural updates to reduce further the human contribution to risk. Unitil reviews its

programs annually but conducts a complete program re-evaluation at a maximum of least every five years.

7. **Report results:** Unitil, as required, reports our performance results to PHMSA and, where applicable, also to state in which the gas system is operated.

## **Contact Information**

For general information, you can contact us at:

Unitil

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In the unlikely event of a gas line emergency, please move to a safe place, and then call 911.