

In accordance with federal regulations, certain pipeline segments have been identified as potentially impacting High Consequence Areas or highly-populated areas. Unitil has developed supplemental assessments, risk analysis, and prevention plans for these higher priority, highly-populated areas. Unitil's <u>Integrity</u> <u>Management Plan</u> outlines the Companies plan and activities to ensure the safety of our pipeline system.

UNITIL/GRANITE STATE GAS TRANSMISSION INTEGRITY MANAGEMENT PROGRAM IMPLEMENTATION PLAN SUMMARY

U.S. Department of Transportation (DOT) regulations at 49 CFR Part 192 Subpart O (Gas Transmission Pipeline Integrity Management) require owners and operators of gas transmission pipelines to manage the integrity of pipelines that could affect High Consequence Areas via an Integrity Management Program (IMP). The central purpose of an IMP is to provide a repeatable process and system to identify, manage, and mitigate pipeline risk.

Unitil/Granite State Gas Transmission (Unitil/Granite) has developed an **Integrity Management Program (IMP) Implementation Plan** which provides the basis for the implementation of a comprehensive integrity management program that satisfies the DOT requirements. The following is a summary of the Unitil/Granite IMP Implementation Plan:

Identification of Pipeline Segments within High Consequence Areas (HCAs)

Federal Regulations require that pipeline transmission companies identify pipeline segments that could impact High Consequence Areas (HCAs). HCAs are areas located along the pipeline that are densely populated, where people congregate (inside or outside), or facilities occupied by persons who are confined, have impaired mobility, or would be difficult to evacuate. HCAs are identified by specific and repeatable processes.

Identification of Threats and Risk Assessment

For purposes of the IMP Implementation Plan, "risk" is defined as the product of the probability, or likelihood, of an event times the potential consequences of that event. Risk assessments are performed to prioritize pipeline segments based on risk and identify what threats and potential consequences are driving that risk.

Baseline and Continual Integrity Assessment Plan

Integrity Assessment schedules are developed based on the threats and risk identified during the Risk Assessment. Assessment methods and intervals are determined based on identified threats and overall risk to ensure system integrity. Integrity management plans, processes and procedures are reviewed and updated to incorporate lessons learned, changes in regulations and industry standards, improvements in technology and integrity management practices.



Condition Remediation Strategy

Conditions identified by the Integrity Assessment are categorized and scheduled for repair basedon condition characteristics. The selection of a repair method is based upon the characterization of the condition through excavation / visual or non-destructive evaluation and the approved method(s) for remediation of the respective condition. Repairs are made with materials and processes that are suitable for the pipeline operating conditions.

Preventative and Mitigative Measures

As required by the regulations, Unitil/Granite uses a repeatable and justifiable process to identify preventive and mitigative measures to reduce pipeline risk. Preventive measures reduce the likelihood of a release due to threats identified during the risk analysis and mitigative measures reduce the consequence of a release.

Performance Plan and Performance Measures

The performance of the integrity management program is measured and reported on an annual basis to DOT- PHMSA for the following primary metrics:

- Number of miles of pipeline inspected (classified by inspection method)
- Number of repairs completed as a result of the integrity management inspection program
- Number of leaks, failures and DOT reportable incidents (classified by cause)

Performance is also measured by tracking the changes to the relative risk profile over time with a goal of reducing risk over time. Unitil/Granite tracks metrics for each of the required threat categories.

Quality Assurance

Unitil/Granite employs a quality assurance plan to demonstrate compliance with this IMP Implementation Plan through documenting key steps throughout the integrity management process, ensuring that personnel involved with implementing this IMP Implementation Plan understand their responsibilities, are experienced and qualified for the work that they perform, and that formal audits/reviews of this document and its implementation are conducted.

Communication

Unitil/Granite, through the implementation of its existing plans and its Public Awareness Program, is also committed to providing information to various external stakeholder audiences on pipeline safety, damage prevention, emergency preparedness and integrity management.

Environmental Impact and Safety Risk

Activities associated with IMP Implementation Plan are performed in accordance with Environmental Construction Standards, which are designed to minimize environmental impact, and may be supplemented with more stringent requirements based on specific assessment project locations and permits.



More Information

The U.S. Department of Transportation, Pipeline Hazardous Materials Safety Administration, provides transmission pipeline operators with specific guidelines on integrity management programs. These guidelines are publicly available for review and can be viewed at www.phmsa.dot.gov.

Contact Information

For general information you can contact us at: Unitil/Granite State Gas Transmission Attn.: Integrity Management 325 West Road Portsmouth, NH 03801 603-294-5191 In the unlikely event of a pipeline emergency, please call our emergency telephone number 1-800-323-4410 and call 911.