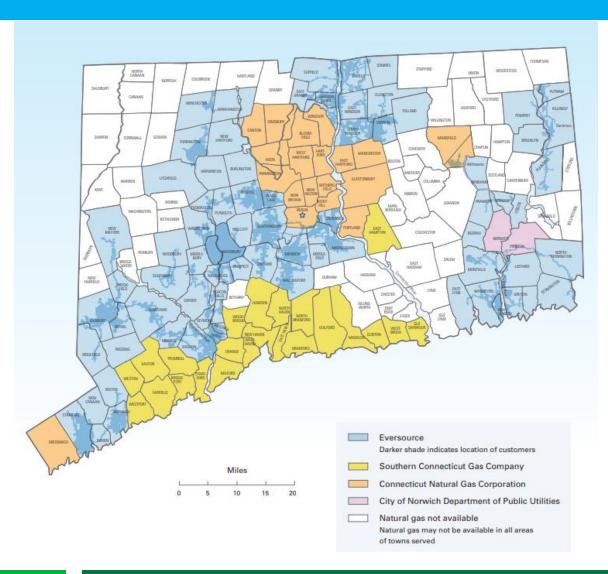


Presentation to NECPUC: Natural Gas Pipeline Safety at Eversource

Eric Eggleston, Manager Gas Policy & Compliance
June 3, 2019

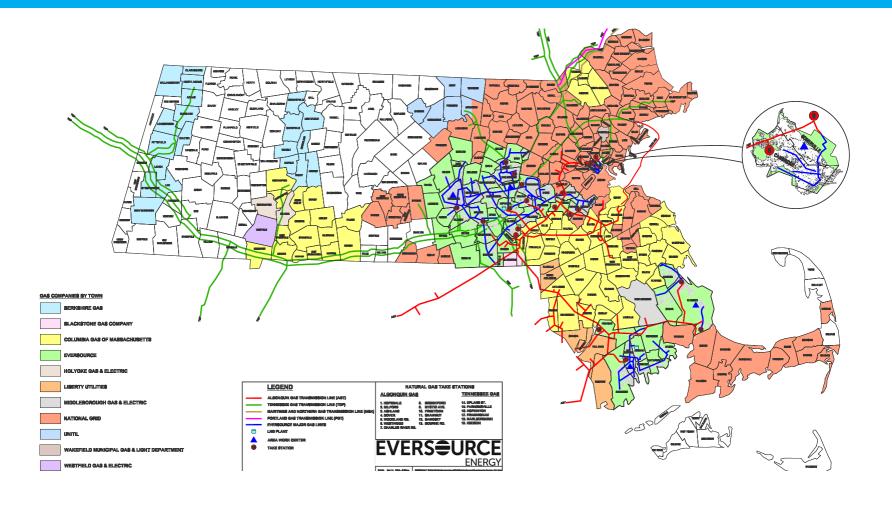


Connecticut Service Area





Massachusetts Service Area



Importance of pipeline safety and quality

- Public Safety / Employee Safety / Contractor Safety the responsibility to transport a volatile product.
- Increased construction activity that must be completed according to all applicable standards.
- Recent major incidents are causing LDCs to continue to examine and improve safety and quality practices.
- Additional media, legislative, regulatory and 3rd party focus on methane emissions and the number and age of leaks.
- Company and Regulatory Position = Zero Tolerance
- Customer Position = Zero Tolerance
- Increased oversight inside and outside industry

We have the responsibility to ensure a safe and reliable gas delivery system to the public.

Ensuring Pipeline Safety

- Three ways for utilities to ensure pipeline safety and quality:
 - Pipeline Safety Management Systems
 - Operator Qualification & Training
 - Quality Assurance & Quality Control Programs



Pipeline Safety Management Systems:

API RP 1173 Implementation at Eversource

Regulatory Principles of Pipeline Safety Management

- ➤ It is the responsibility of the operator to understand and manage the risks associated with their pipelines
- PHMSA's and State Regulators' primary role is to establish minimum safety standards (defined in the regulations by required risk control practices) and verify that the operators perform to these standards
- PHMSA and State Regulators strive to impact operator performance beyond mere compliance with the regulations
- Focus is on PERFORMANCE

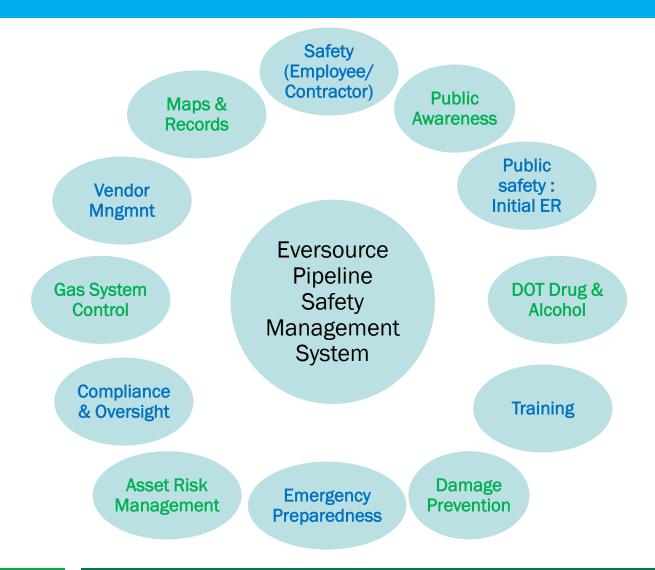
What is Eversource's Objective?

The goal of the Pipeline Safety Management System (PSMS) is to ensure that the processes in place at Eversource Gas are being implemented in an effective and efficient manner to prevent control breakdowns.

PSMS enables people to execute tasks using risk management, established controls and continuous improvement to meet safety and Eversource business objectives.



Eversource PSMS Programs





Eversource Operator Qualification Program

OQ Training

- Decision made to develop an Eversource OQ Plan in 2017, implemented in mid-2018 – moving away from the NGA OQ Plan
 - Better control over testing and qualifications
 - Allows for training and testing to be completed to Eversourcespecific standards and policies
 - Effectiveness review of knowledge-based exams underway in 2019
 - Are questions written to appropriate comprehension level?
 - Are questions structured to not lead test-taker to the answer?
 - Eliminate "choose all that apply" questions
 - Validate multiple choice questions to ensure wrong answers are plausible, but incorrect

OQ Reporting and Controls

Monitor Employee Qualification



90 Day Expiration Report (triggers scheduling process)

- Distributed weekly lists employees expiring in the next 90 days
- Supervisors and Training will receive report
- Managers can be added to distribution as requested

Failure Report (triggers rescheduling process)

- Auto generated from EWN, sent in real-time to Supervisors
- Managers can be added to distribution as requested

Supervisor Hierarchy Report

Scheduler will monitor this report and work with HR/Ops Supervisors to validate reporting structure

QR Codes

· Supervisors, Managers and Regulators will be able to look up an employees qualifications using the QR code

Super Users

• Select people within Operations will have access to EWN to see qualifications and pull reports

Status against Job Title / Contingent Assignment – in place

- Tasks assigned by job title/contingent assignment
- Report lists the current status of all required tasks

Monitor Program Implementation

Prometric Report

- Report lists no-shows, technical issues, personnel issues.
- Training will receive from Prometric and will forward to Operations upon request.
 - Report shows:
 - Upcoming expirations
 - Volumes
 - Tasks
 - Emerging trends (i.e. questions)

Leverage Monthly Scorecard

Executive level Dashboard

- · Pass/fail rates

Monitor Contractor Qualification

OQ Status based on ES Task List - in place

- Impact to contractors and contingent work roles
- Report validates that the contractor/contingent worker has the qualification to complete the assigned job in accordance with ES OQ Plan





Training New Employees

Field Workers

- Apprentice programs in place to develop and train employees when hiring or transferring into new roles
- Training occurs to Eversource standards, policies and practices as part of this program
- Supervisory Employees
 - New Supervisor Training program beginning in 2019 for new supervisors and transfers
 - Includes training to Eversource standards, policies and practices (both self-study and in-class discussion)
 - Self-study of policy documents will be tracked as part of the Training program



Eversource's QA/QC Program



QA/QC Overview

- Quality management ensures procedures, processes, technology and people work effectively to achieve excellence in safety, compliance, reliability and productivity.
- QA/QC programs perform random, post audits and re-dig inspections highlighting where gaps or risks to the business exist.
- Objectives
 - Current: Review Construction with respect to Federal/State codes,
 Construction Standards, Safety Policies and Operator Qualifications.
 - Planned: Adding auditors in each state to expand QC efforts and oversight beyond Construction (to include all areas of the Gas Business Unit)
 - Take corrective action when required.
 - Re-direct focus on proper procedures.
 - Modify current procedures/training.
 - Promote the addition of new procedures/training.

By inspecting and taking corrective action when deficiencies are identified, the quality of operations and systems are improved.

Eversource QA/QC Program



Connecticut

QA Daily Audit Form

Overview				
Date	April 10, 2017			
Start time	4:39 PM 41.55246,-72.659			
State	Connecticut			
Region	Central			
Town	Middletown			
Address	42 Fountain Ave			
Supervisor	See comment			
Manager	See comment			
Contractor	Henkels and McCoy			
Foreman	Vitale			
Comment	Pete Chapman/Rob Pantalone			
QA/QC company	Eversource QA QC			
QA/QC auditor	Martin Summers			

Prepa	ratio	on		
Permit requirement fulfilled	Yes			
Description of work	Service			
Scan OQ card IIII				
OQ records	Yes			
Work order number	8	М	720301	
Tailboard documented	Yes			
Gas facilities marked per OM-193	Yes			
Other facilities marked per OM-193	Yes			

CBYD				
CBYD ticket number	Yes			
Excavating in accordance with state regulations	Yes			

- Auditors utilize electronic tablets in the field to capture detailed audit information, including photos
- Each day, the audit data is uploaded and saved to a central database.
- QA/QC utilizes the central database to provide reports to management on a weekly, monthly, annual basis.
- Report on trends/issues
- 2018 QA/QC Audit Quantities
 - ✓ Random Audits (1205)
 - ✓ Mark-out Audits (322)
 - ✓ Re-dig Audits (268)
 - ✓ Post Audits (743)

QA/QC Corrective Action Process



Non Compliant Observations

 A Non-Compliant Observation (otherwise known as an NCO) is a product and/or process that fails to meet the requirements specified by company procedures or standards and state and federal codes.

Corrective Action Plan

 A Corrective Action Plan is a documented plan used to track the corrective actions which are implemented in order to eliminate the non-compliant observation and prevent re-occurrence.

Benefits and Enhancements



- Ensure a safe system with no incidents
- Improved awareness and depth of knowledge regarding installation standards
- Transparent communication with contractors regarding continuous improvement
- Decrease in number of violations from regulators
- Increased management oversight of internal and external crews to improve safety and reduce incidents
- Eversource training now includes training to management on QA/QC inspection process to help identify and mitigate risks