

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Public Hearing In the Matter of:

Department rulemaking establishing requirements for Uniform Reporting of Lost and Unaccounted-for Gas

Boston, June, 25th 2019

SUSTAINABLE WESTON ACTION GROUP TESTIMONY

Liz Steel – 455 Concord Road, Weston

Lori Hess – 217 Westerly Road, Weston

Weston residents have long valued the natural beauty of their town. As stewards of the town, a growing number of residents have become increasingly concerned about the impact of the gas leaks – not only in terms of health & safety, but also the environmental costs.

The odor from gas leaks around town is very pronounced and considered a public nuisance in some neighborhoods. Trees are dying and other vegetation is compromised in locations where the smell of gas is constant. And residents who have called the gas service provider, National Grid, to report the smell of gas, feel frustrated with the response they often get: that the leak has been checked and it is considered “non hazardous.”

So last year, a team from the Sustainable Weston Action Group, led by Lori and I, got in touch with the Gas Leaks Allies to try to find out more about the gas leaks in town. Our goal was to make the “invisible” visible – helping to assess the town’s carbon footprint, by finding out:

1. how many unrepaired leaks there were in town;
2. how we could get the leaks scheduled for repair; and
3. how much methane was leaking impacting the town’s Greenhouse Gas emissions.

Using information produced by HEET and Mothers Out Front, we were able to piece together an initial picture of the gas leaks situation in Weston, and created this map to help others visualize the scale of the issue.

At the end of 2017 National Grid reported that Weston had 141 unrepaired gas leaks, some of which were over 20 years old, and all were considered Grade 3 leaks – or non hazardous. We also found out that Weston' had higher pressure pipes at 60PSI, many of which were made of corroding cast iron or bare steel. Additionally, a few neighboring communities facing a growing number of unrepaired gas leaks, had funded an independent gas infrastructure survey. The results of these independent surveys showed up to 4 times as many leaks as the gas utilities reported.

With the support of over 200 residents we presented this information to our Board of Selectmen, requesting the funds to carry out an independent gas infrastructure audit in Weston. Funding was approved for an initial survey, carried out by Bob Ackley of Gas Safety Inc., using a Cavity Ringdown Spectrometer methane analyzer. When the results came back showing 100% more potential leak locations than reported by National Grid, the town approved a second, larger budget for a full audit of all the gas leaks in Weston.

The full audit confirmed a total of 295 gas leaks – approximately 1 leak for every 12 households in Weston. Each of these leaks was measured using the leak extent method, confirming that 102 of the leaks were 2,000 ft² or more. Two leaks measured over 10,000 ft². Additionally, a total of 325 trees were identified as either already compromised, or at risk, due to their location in the leak zone.

This data can now be used to help prioritize gas leak repair under the new DPU regulations in collaboration with National Grid. Additionally, we can now accurately quantify the methane leaking from our pipes.

The volume of fugitive methane emissions is currently estimated using national average leak data per mile of pipe multiplied by an emissions factor for each specific pipe material. Weston has approximately 84 miles of public roads, which, when multiplied by the national average of 1.3 leaks per mile, would give an estimated total of 109 leaks. This is only 37% of the actual number of leaks confirmed in the independent audit, so any emissions calculation would be significantly lower than reality. In addition neither the size of the leak nor the pressure of gas in the pipes is included in this calculation.

To meet the 2008 MA Global Warming Solutions Act goals we need an effective way of evaluating the town's fugitive methane emissions. Only by accurately measuring the emissions can we track any future reductions in support of the Law. "You cannot manage what isn't measured."

In conclusion:

- When we started this journey we were at 141 unrepaired leaks in Weston, which was revised by National Grid at the end of 2018 to 175.
- Following the independent audit just completed we are now at 295 confirmed unrepaired gas leaks – 35% of which are considered to have "Significant Environmental Impact" or G3SEI leaks.
- Only because Weston could afford to fund the \$33,500 that the independent audit cost were we able to accurately measure the scale of the leaks and provide the transparency needed to drive environmental accountability.
- Our hope is that Weston can be used as a case study to help the DPU identify the necessary steps to be taken to ensure all communities in the Commonwealth of Massachusetts are properly protected from a crumbling gas infrastructure, while actively contributing to the State's greenhouse gas emissions goals.