



SUSTAINABLE WESTON ACTION GROUP

WESTON GAS AUDIT ANALYSIS

As of December 2018, National Grid reported 175 unrepaired Grade 3* gas leaks in Weston. This was an increase of 24% since December 2017, the result of aging pipes and limited non-emergency maintenance. The oldest gas leak was first reported over 20 years ago.

In February 2019 the Town of Weston approved a proposal to carry out an independent gas audit, to confirm leak locations and assess their size and impact. The audit comprised two phases:

- I. Cavity Ringdown Spectrometer Survey: to locate and map all elevated methane levels in town
- II. Full assessment of each detected gas leak, to determine the source, size and extent of property damage, including trees and other vegetation, caused by the leak.

The gas infrastructure audit was carried out by Gas Safety Inc from March-June 2019.

Audit Results:

- 292 unrepaired gas leaks were confirmed in Weston as of June 2019, classified* as follows:
 - Grade 1: 2 leaks, due to their proximity to building foundations
 - Grade 2: 163 leaks, due to the visible damage to property, including trees and vegetation
 - Grade 3: 127 leaks
- 102 leaks measured 2,000 ft² or more using the industry standard “leak extent” method, in addition:
 - 11 leaks measured 6,000 ft² or more
 - 2 leaks measured greater than 10,000 ft²
- 324 trees were assessed as either already compromised or at risk due to their location in the leak zone.

Audit Analysis:

1. High number of new leaks discovered

- 66% more leaks identified than reported by National Grid
- 1 leak for every 12 homes in Weston.

2. Significant Environmental Impact

According to new ruling by the MA Department of Public Utilities** all Grade 3 gas leaks that measure 2,000 ft² or more, are deemed to be super-emitters with significant environmental impact (G3SEIs) and need to be prioritized for repair

- 35% of total leaks assessed are super-emitters or G3SEIs (State average = 7%)
- Of the 11 leaks confirmed at 6,000 ft² or more, only 3 were new leaks, the other 9 are all known to, and previously reported by, National Grid
- The largest leak assessed at 14,400 ft², on the corner of Concord Road and Jericho Road, was first reported by National Grid 4.28.99
- The G3SEIs impacted 219 trees; the 11 largest leaks impacted 41 trees.

NOTE: The majority of Weston gas pipes operate at 60PSI, a higher pressure than many towns. This factor is not yet included in the environmental assessment of the leak.

* Gas leaks are ranked by the industry based on risk of damage to life or property where: Grade 1 is deemed hazardous, needing immediate repair; Grade 2 is deemed potentially hazardous, needing urgent repair; and Grade 3 is deemed non-hazardous, requiring only annual check-up.

** <https://www.mass.gov/regulations/220-CMR-11400-uniform-natural-gas-leaks-classification>