

Detecting a Natural Gas Leak

Do you know what natural gas smells like? Do you know how to detect a natural gas leak?

According to a recent Ipsos Reid survey conducted by a gas distribution system operator in

Canada, only 33% of the respondents could accurately describe the smell of natural gas. That is
a relatively low number considering the potential risks associated with a natural gas leak.

In its natural state, natural gas is odorless. To address this, an odorant (mercaptan) is injected to give natural gas its distinctive rotten egg/Sulphur-like odor. This odor makes even the smallest leak easy to detect.

Though most natural gas leaks can be detected by smell, it is important not to rely on this sense alone. Other indicators of a potential gas leak include hearing a hissing sound, dirt or dust blowing from a hole in the ground, bubbling in wet or flooded areas, and/or seeing dead or dying vegetation around a natural gas meter, outdoor appliances, or piping.

Before a natural gas fire or explosion can occur, two conditions must be simultaneously met. First, natural gas and oxygen must exist in certain proportions (5% to 15% natural gas mixture). Outside of this flammability range, natural gas is too lean or too rich to burn. Secondly, there needs to be an ignition source, such as a spark or flame.