

WALLEYS QUARRY

PRESS INFORMATION

Date: 20.01.2021

Title: Gas Management

Landfill gas is produced by the natural decomposition of waste deposited within a landfill. This is undertaken by single-celled microbes which produce methane gas. Within the landfill environment, it is typical for the composition of landfill gas to consist of 45-55% methane, with the remainder of the gas composition comprising carbon dioxide, water, and other trace gases. The process operates widely in the natural environment where oxygen is absent, one example being 'marsh gas' where layers of plant material build up over time, oxygen becomes depleted, and the decomposition continues in the absence of air.

Walleys Quarry Ltd capture the landfill gas, produced through this decomposition process through an extensive series of wells, pipes and infrastructure, removing it from the body of the landfill and collecting the gas for recovery or treatment through the onsite Gas Utilisation Plant. Here the collected gas is principally treated through three gas combustion engines, which have the ability to recover the energy held within the gas and resulting in the production of electricity for direct feed into the National Grid. Where necessary landfill gas can also be treated onsite through a series of landfill gas flares, thus ensuring that there always remains adequate capacity to treat and destroy the landfill gas produced onsite.

In 2021, here at Walleys Quarry we successfully captured a volume of landfill gas equivalent to over 8 times the internal volume of the Empire State Building in New York. This gas has been destroyed, put to good use and prevented from entering the environment. This resulted in the generation of 10,500 MW/hrs of electricity, fed directly into the National Grid; enough to supply the electricity needs of around 5000 homes for an entire year.

ENDS

For press information please contact press@walleysquarry.co.uk

Notes to editors:

Website: <https://www.walleysquarry.co.uk>

About Walleys Quarry:

Walleys Quarry in Newcastle-Under-Lyme, Staffordshire is a landfill site, offering safe disposal of waste that cannot otherwise be re-used or recycled.