

BOO HOLE LANDFILL

Virtual Gas Curtain

PROJECT SCOPE

Former landfill formerly determined as statutory contaminated land under Part 2A of the Environmental Protection Act 1990, made on the basis of the potential significant risk to human health associated with migration of hazardous ground Gas towards the residential properties located on the eastern and southern boundary of the site. The landfill was historically worked as a sand quarry from circa 1893 for approximately 60 years. The quarry commenced accepting landfill waste from approximately 1971.

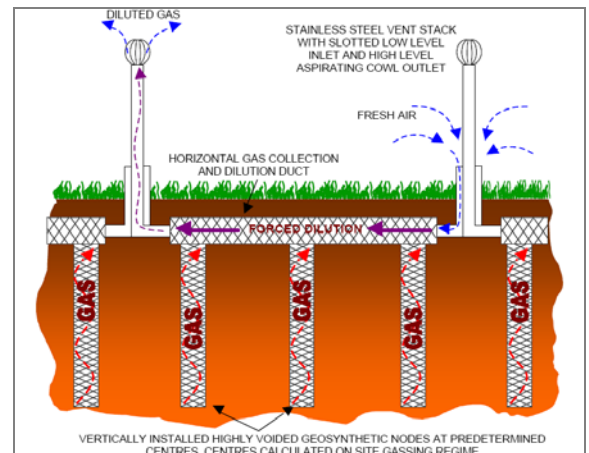
VERTASE FLI ROLE

VertaseFLI won a competitive tender to install a gas migration barrier (Virtual Gas Curtain (VGC)) along the eastern and southern boundaries of the site bordering the residential properties. The concept of the VGC is to form a low pressure or low gas concentration area relative to the surrounding gassing ground, to encourage gas to flow towards the barrier, and allow subsequent venting to atmosphere. This is achieved by driving discrete, highly permeable geocomposite vent nodes into the ground.

VertaseFLI attended a number of drop in clinics for local residents, in partnership with the Local Authority, in order to address any concerns with the proposed works.

The site works comprised the installation of 680m of VGC to depths of 5m to 10m below ground level. The geo-composite nodes were inserted at 1m intervals along the curtain length with 3m high vent stacks located at 20m intervals. During the works, VertaseFLI conducted vibration monitoring on a daily basis on the sites boundary with residential properties. VertaseFLI also managed an archaeological investigation that was conducted ahead of our works.

The barrier was successfully installed with works completed ahead of schedule.



PROJECT OVERVIEW

CLIENT

ROCHDALE METROPOLITAN BOROUGH
COUNCIL

LOCATION

HEYWOOD, ROCHDALE

PROJECT VALUE

£300,000

DURATION

8 WEEKS

SERVICES PROVIDED

- Installation of Virtual Gas Curtain on a Part 2A site
- Stakeholder communications
- Vibration monitoring



EXCAVATED LEADER TRENCH



NODE INSERTION



INSTALLATION OF GEO-COMPOSITE NODES



INSTALLED SECTION OF NODES



VENT STACK BASE



COMPLETED VENT BOLLARD