From:
Sent: 07 April 2025

Subject: RE: HS Components, Shawcross House, Dewsbury

The boreholes were positioned within the footprints of the proposed extension.

In response to the LPA's comments, we've reviewed the Phase One Desk Study Report, which assessed the risk of ground gases as low. This conclusion was based on several factors, including the landfill ceasing operations in 1991, the diminishing potential for gas generation from any remaining biodegradable material, and the presence of landfill gas control measures (e.g., vents). Furthermore, the fact that residential development has already been constructed on the former landfill area suggests that significant levels of active ground gas are unlikely to be present.

The report also notes and Solmek agrees, that given basic radon protection measures are appropriate for the proposed extension, these measures will also provide a degree of mitigation against ground gases such as methane and carbon dioxide.

The Phase Two Site Investigation found the made ground to be relatively shallow (less than 1.30m thick), predominantly cohesive, and overlying natural clay. This clay stratum, typically a low-permeability material would inhibit the migration of ground gases. No putrescible material was identified within either the made ground or natural deposits and the majority of made ground beneath the footprint will likely be stripped further reducing the thickness.

During the monitoring period, ground gas levels were generally low, with a maximum recorded CO_2 concentration of 4.4% and no methane detected, whilst no flows were recorded. Taking this into account, along with the points outlined above, Solmek maintains that the risk from ground gas within the footprint of the proposed extension remains low.

I trust this addresses the LPA's concerns appropriately, but let me know if you need anything further.

Kind Regards