

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From:	Environmental Health	To:	Development Control
Our Ref:	CONS/15/00747	Your Ref:	APP/15/00553
EH Case Officer Extn:	44 6677	Date:	06 July 2015
DC Case Officer:	Sally Smith		
DC Case Officer Extn:	44 6522		
Application Number:	APP/15/00553		
Site Address:	Proposed Extra Care Development, Hambledon Road, Waterloo ville		
Proposed Development:	Discharge of Condition 8 of Planning Permission APP/14/00854.		

Observations / Comments:

I have reviewed the Soils Ltd. Addendum Report Ref: 14512/SGRA/Rev1.01, and broadly agree the assessment details, and conclusions.

The report concludes a soil gas regime corresponding to "characteristic situation 1" (CS1, no gas protection required); corresponding to NHBC System 'green' classification. The numbers support this to a degree, however I note that the site specific monitoring was undertaken over a short 4 week period within only one low/falling atmospheric pressure event.

Further monitoring is available relative to the wider MDA site (around six visits undertaken over 6 month period), however these results do not specifically target the site, and are also considered (for assessment purposes) as 'short term' monitoring. It cannot be concluded with confidence (therefore) that worst case conditions are likely to have been captured / recorded within the existing dataset.

Under the Wilson & Card assessment procedure, it would be appropriate to add 1 to the CS, i.e. conclude CS2 (basic protection required) in order to account for this uncertainty. Under the NHBC traffic light system, depending upon the definition attributed to 'typical maximum' concentration, it could be appropriate to conclude an 'Amber 1' classification (basic protection required), as the corresponding typical maximum is reached or exceeded in two trial holes.

It is also of note that the well soil gas response zone used for the recent Soils Ltd. assessment omitted shallow made ground, targeting natural soils only. In this way, some local gas generation (from made ground) could have been missed by the current monitoring as the wells were isolated from this deposit.

These points are noted in order to demonstrate / record consideration - however I believe that there is sufficient information to conclude that soil gas poses a low risk to the consented development, for the reasons outlined below:

- Maximum recorded Hydrogen sulphide concentrations are ~3% of acceptable 24hr

exposure concentration limits. No long-term chronic exposure limits have been adopted to my knowledge.

- No detectable Methane has been recorded in any borehole
- Maximum recorded CO₂ is 6.7%. This value has been used in calculating the gas screening value (as a conservative assessment), but this value was not necessarily recorded on site, and does not represent a 'typical maximum'.
- Typical recorded maximum on site is 1% (NHBC 'Green') from short term data - wider site typical maximum is around 2% (from 6-month monitoring).
- Flow rates are low (cohesive, non-granular soils), and where recorded, correspond to atmospheric pressure trend (i.e. driven by atmospheric pressure, not in-soil gas generation). Maximum positive value used for calculation of the gas screening value used.
- Oxygen results indicate good well seals, and limited on-site depletion.
- Standard damp-proofing / moisture resistance measures in buildings offer a large proportion of the measures of protection required by CS2, and a reasonable degree of protection to residents, employees or visitors to the premises. Service voids (particularly below ground) may be at marginal (asphyxiant) risk - but should only be accessed by specialist contractors used to managing such risks.
- Shallow made ground is of insufficient thickness (<1m) as to pose a significant generation potential (accounting for the description given in borehole logs)

In this way, the distinction between CS1 & CS2 is marginal, and largely academic. I agree that the results support a conclusion of very low risk, but contrary to the submitted report, acknowledge that these results are not authoritative (i.e. there remains a degree of uncertainty).

I agree that the available data does not support a need for specific scheme of gas protection measures (8.b). On balance, I can support the full discharge of condition 8.

A handwritten signature in blue ink, appearing to read 'Jonathan Driver', with a horizontal line underneath.

Mr. Jonathan Driver
Environmental Control Officer