

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From: Environmental Health **To:** Development Control

Our Ref: CONS/19/01306 **Your Ref:** APP/18/01107

EH Case Officer Extn: 44 6677 **Date:** 24 July 2019

DC Case Officer: Gill Glover

DC Case Officer Extn: 6534

Application Number: APP/18/01107

Site Address: Out Buildings, 97 Lovedean Lane, Waterloooville, PO8 9RN

Proposed Development: Erection of 3 No. 4 bed dwellings including parking and landscaping (approved 22.3.19). **A request has been made to discharge the following condition(s) on the above application: Condition 6: Phase 2b (further) investigation, risk assessment, mitigation scheme & verification plan.**

Observations / Comments:

I have reviewed the Omnia Environmental Consulting Supplementary Geo-Environmental ref: A10965/181112/L1 dated 14/11/2018, alongside the Phase I-II Geo-Environmental Site Assessment Report previously submitted (A10965/1.0 Jul 2018).

The review made reference to the Councils own spatial data, statistical tools, and the approved site plan(s).

A10965/1.0 (Phase I-II investigation report)

This report identified elevated Cadmium & PAH spp. within a sample from trial hole WS101, and proposed further investigation in this region. No statistical assessment was undertaken, due to the small available sample size, though I would agree that results for Zn & Cd qualitatively appeared to be likely candidates as statistical outliers. The following is reproduced from the consultation Ref: CONS/18/02491 dated 25/01/2019

"I agree with the authors that further investigation of made ground is necessary, and I would also agree that WS101 may be an outlier. However, I disagree that the logical conclusion is that WS101 is the only likely deposit which may warrant investigation, and that the further investigation should be limited on the strength of the submitted report."

The recently submitted report pre-dates that response, and so could not have responded to that comment. The result is that there remains a gap in the effective characterisation of the site which could be (and probably ought to be-) regarded as unacceptable when considered against both the local and national policy objectives which justified the imposition of c.6.

Critically, it is noted that trial hole WS103, which is assumed located within small scale landfill comprising the former chalk pit and represents a logged depth of made ground (land fill)

of around 3.5m, was only sampled at the near surface (<0.2m below ground level) and at the natural soils side of the horizon representing the limit of fill. This leaves the main body of fill, which may extend to over 650m² (>1000cu.m) uncharacterised.

It is also noteworthy that the deep sample taken from WS103 at 3.6m depth was not scheduled for chemical analysis, with results presented only for Soil Ph, Sulphate, and moisture content (i.e. a geotechnical suite). No leachate tests were undertaken, and the report did not robustly deal with the groundwater sensitivity represented by the SPZ1 designation.

The above forms the context for the assessment of the recently submitted report, and I have referred to results from the phase I-II investigation in considering the results of the supplementary investigation.

A10965/181112/L1 (Phase IIB / Supplementary Investigation) - Soils

This report describes the results from 5 no. shallow hand-dug trial holes distributed radially in an approximate 10m radius around trial hole WS101, being the location of the identified (probable) outliers. All samples analysed were from within 0.3m of the existing surface level. The report does not present logs, but implies that all locations encountered made ground. I have reviewed the results on the basis that all sample results are representative of Made Ground.

Whilst I would not agree the qualitative rationale for dismissing the elevated concentrations of Pb & and PAH species (DahA, BaP & BbF) presented at 6.2, it is worth noting that the authors caveat the conclusion of this section as being contingent on there being no change in the proposed layout of the site (which might make contamination sensitive landuse coincident with the locations where concentrations exceed screening levels.

Reference to the sketch site plans provided in the report appendices shows that the report was written prior to the gaining of consent for the approved plans which do indeed place contamination sensitive landuses in the areas of the site which the report (Table 1.0) concludes requires 'further assessment'.

I have undertaken some statistical tests based upon the results from both the A10965/1.0 & A10965/181112/L1 reports, and from this conclude that whilst elevated concentrations of Pb, Cd, Be, and Zn may be dismissed as not representing a significant risk (based upon the sample results presently available), the PAH species are elevated to levels which are of concern; notably:

- There are no clear statistical outliers, meaning that it is appropriate to consider made ground as a single unit in the absence of any other conceptual reason to segregate the deposited material into separate zones
- 95th percentile values for Benzo(a)Pyrene (BaP), Benzo(b)Fluoranthene (BbF) and Dibenzo(a,h)Anthracene (DahA) all exceed their respective generic assessment criteria in near surface soils within garden areas corresponding with plots 1 & 2.
- There is at this point no clear conceptual reason to expect the made ground <1m depth at the position of trial hole WS103 to be materially different to the "Made Ground contaminant population" comprising WS101, HP201-HP205 (inclusive), and so it is not considered unreasonable to infer that soils corresponding with the footprint & private garden area to plot 3 is likely to be similarly affected.

The information currently available would suggest that the appropriate conclusion would be to consider that contamination present within (represented by-) made soils represents an

unacceptable risk to future occupants, and that a risk mitigation or remedial scheme should be implemented and verified. It is possible that additional investigation may show that plot-level average exposures are within acceptable limits, but the current results do not support this - so the applicant would need to undertake additional sampling to justify a 'no intervention' approach.

A10965/181112/L1 (Phase IIB / Supplementary Investigation) - Gas

As regards ground gas - I have reviewed the monitoring data carefully, and can agree the conclusions of the report (that the results are likely to be representative of natural soil processes, and do not represent a risk from methanogenic material within made soils). I therefore agree that no gas protection measures are necessary, despite CO₂ concentrations exceeding the thresholds typically associated with a need to consider basic gas protection.

Conclusions

Irrespective of any challenges I may have raised as to the robustness of the dismissal of risks within the report; it is apparent that the report author's conclusions are contingent on the scheme layout (location of contamination sensitive elements - e.g. gardens and soft-landscaping), which has now changed.

I must conclude that the author's conclusions would have been different had the report been written with the approved scheme in mind. It should therefore be uncontroversial to recommend that the discharge of c.6 be refused at this time, and that suitable consideration be given to an appropriate response to the available results in the context of the approved scheme, and the comments made under this response, and that dated 25/01/2019.

Mr. Jonathan Driver
Environmental Control Officer