

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From:	Environmental Health	To:	Development Control
Our Ref:	CONS/18/00730	Your Ref:	APP/15/01233
EH Case Officer Extn:	44 6677	Date:	14 May 2018
DC Case Officer:	Ms R Ballam		
DC Case Officer Extn:			
Application Number:	APP/15/01233		
Site Address:	Street Record, Fulflood Road, Havant		
Proposed Development:	Erection of approx 1,920sqm of Warehouse, 890sqm of office space and a 220sqm training school facility with associated enclosed loading areas, car parking and refuse storage (approved 24.1.16). Request to Discharge Conditions 5 and 9 (16/04/2018).		

Observations / Comments:

I have reviewed the AKS Ward response to c.9 (piling), the SoilTechnics GI Report Ref STN3739B-G01 rev.0, Enviro Remediation Statement (2006), available spatial records, and previous 3rd party reports, Entec, 2003 (unfortunately incomplete).

c.9 - Piling Risk.

The AKS Response provides adequate justification of the need for piling, largely resulting from the depth and variability of made ground at the site associated with a former cut & fill (ground levelling) operation. No detailed (or indicative) structural design is presented which demonstrates anticipated pile depth / diameter / number, but as the GW body contiguous with the water levels of the riders lane stream is at ca.4.0-4.5m below site ground levels (BEGL), it is unlikely that pile depths could in any event be limited to avoid penetration of productive strata.

It is also noted that groundwater is typically encountered within the London Clay, and that the Bognor Sand has been noted to be 'essentially impermeable' (meaning that local perched groundwater contiguous with the stream is likely to be that associated with made ground, flowing with the topographic slope of the low permeability Bognor Sand Unit. Whilst this does in principal mean that a low permeability unit would be penetrated by piles (potentially creating a new migration pathway for mobile contaminants), where encountered groundwater appears to be confined (under a degree of pressure), reducing the risk of vertical migration from shallow>deep groundwater, especially where contaminants are light-phase-non-aqueous (fuel range hydrocarbons).

Best practice low-displacement techniques are proposed to be adopted. These are considered to be appropriate to the site, and on the basis that this forms a binding statement in the (likely) event that piling is adopted in preference to a ground bearing raft; I am able to support the discharge of c.9.

c.5 - Contamination Assessment

I note that the conclusions of the SoilTechnics report comprise (essentially) proposals for further works. In this regard it is difficult to see how the submission of this report is compatible with a discharge of condition 5.

This notwithstanding, I have undertaken a critical review of the report, and other available information. Some key points are listed below:

- Soil Technics Report lists a 'Structural Soils Ltd. report "Interpretive report on ground investigation at Proposed MIPA Paints site, Fulflood Road, Havant' (ref 730438, September 2015)" as Research material. This report has not previously been made available to Environmental Health (or submitted to the LPA, to the best of my knowledge), and this report may contain information which would support a positive determination to an application to discharge c.5.
- Soils results from the latest phase of works (undertaken by SoilTechnics) are largely favourable, identifying low level contamination across the site between 0&0.5m BEGL, and low level residual contamination (and olfactory evidence of hydrocarbon contamination close to a former below ground fuel storage tank and known prior fuel spill in just to the East of the site boundary (to which the Enviros statement / letter report relates). In this respect the bulk source and most heavily impacted soils have already been removed, significantly reducing the likelihood that the PAH identified in this region (DTS01a & DTS01b, SE corner of the subject site) is associated with a potentially significant source.
- The SoilTechnics report does identify an elevated result within groundwater in the central portion of the subject site, at DTS04. This trial hole is interesting, showing a waters impact only, with soils otherwise 'clean' with respect to Hydrocarbons / PAH. Hydrocarbons in groundwater at this location are shown to exceed their respective theoretical solubilities in a number of cases by several (upto 6-) orders of magnitude (i.e. 1 million %). This is indicative of either miscible free product, or product sorbed onto fine particulate matter which is mobile in groundwater. The Entec Report confirms a pathway between perched water within made ground and the stream. Further investigation of the source of this result is proposed by SoilTechnics.
- Whilst no probable explanation for the elevated results is referred to by SoilTechnics, a review of the Entec report yields possible sources for the hydrocarbon impact to groundwater at DTS04, most notably referring to '*Oil staining near plant room*', '*former electricity substation*, and *2 no. former AST's*' at this location [the plat room], and '*known contamination excavated during new service trench*' [near the plant room]. Soils at Entec trial hole no. DS5 (down-assumed-hydraulic-gradient) exhibited a hydrocarbon odour, but little soils impact was noted in laboratory sampling (as with DTS04). No groundwater was encountered however, so it is possible that the impact is within / on the surface of groundwater, below the maximum depth of DS5. The Entec report also identified a former oil interceptor chamber and '*former underground fuel pipework ant boiler house*', neither of which were inspected / investigated by SoilTechnics, or have been previously.

Considering the above, it is possible that a mass of contamination impacted soils exists within the curtilage of the site which could be considered to be a source in it's own right (i.e. of leachable contaminants, capable of reaching the surface water). In this respect, I concur with the conclusions of section 12 of the SoilTechnics report (that this possibility should be investigated).

It is recommended that either the discharge of c.5 be refused pending the undertaking of a limited phase of additional site investigation in line with submitted proposals, or that any other available material information (e.g. the 2015 Structural Soils Ltd. report) be submitted for review,

with a view to determining whether sufficient information is available to conclude that the source is likely to exist solely off-site, or to have been already mitigated (and the DTS04 result representing a migrating plume, now unconnected with any extant source).

Best Regards,

Mr. Jonathan Driver
Environmental Control Officer