

Daphney,

My first comment would be that rolling all requirements in to a single condition would have the effect of delaying possible sign off until at least completion of topsoil placement (last step in remediation proposals that would require validation). Not a particular problem if there's no pre-commencement element.

If I was completely satisfied that the referenced reports were adequate, I would have no particular issues with dealing with the condition in the manner proposed by Jeffrey Douglas, below. However, omission of groundwater monitoring from the investigation scoping (and therefore the subsequent reports), and some uncertainty with regards TP numbering (and possible omission of logs from unreported TP's) allow some room for risks (to offsite receptors) to exist that would not be readily apparent from the existing investigation, or necessarily from an inspection of arisings / soil conditions or local groundwater encountered during the course of construction works – of principle concern are those risks related to mobile volatile PAH / VOC existing on or within shallow groundwater, but also secondarily the possibility that elevated metals concentrations could be mobile in dissolved-phase.

No descriptions of the encountering of free product (in association with soil samples) were included within the report (e.g. tars), and the analytical results do not point to the encountering of significant gross contamination that may not have been readily identifiable by visual / olfactory means. There are references to 'black' soils in association with hydrocarbon odours – natural black sands / gravels / clays are not typical for the area - and it is assumed likely therefore that the black soils are likely stained black by weathered hydrocarbons. The lab sample description for WS4 (2.0m) states "black clayey gravel with rubble & tar", which the trial hole log describes as "grey black sand & gravel with v. occasional brick fragments & hydrocarbon odour" – lab reports making clearer that the description of 'black' likely refers to 'stained'. WS4 was finished as a well, and should represent a worst case result (being located broadly within the footprint of a former tank feature, being porous / granular Made Ground, and being contiguous with natural flint gravels (1.0m BEGL to 2.0m BEGL approx.) & sands (from approx. 1.75m BEGL).

Hydrocarbon odours associated with this depth (circa. 2.0m BEGL) are noted within TP11, & WS2, 3, 4, 5. Odours absent from WS1 & TP4. TP's 2, 3 & 7 were <2.0m deep. This is suggestive of some mobility, or multiple inputs tending to aggregate within this strata. There is no description of groundwater encountered (sheens, odours, evidence of DNAPL or globules of free product) – could assume clean, but as stained tarry soils are described simply as 'black', this may not be a solid assumption. A single groundwater sample from WS4 would be informative, and would determine whether we believe that further trial holes (for more extensive groundwater monitoring) is necessary for 'plume' delineation.

As regards our earlier conversation – the only purpose of the pre-commencement element for this specific site, at this point, is to prevent the accidental destruction of the extant well, from which a groundwater sample (or samples), could be taken, or indeed indicative vapour / gas spot monitoring could be undertaken (though gas monitoring may not be as informative as we would like unless taken over a period of time, encompassing a falling barometric pressure event). I've no particular issue (other than the probable destruction of the extant well) with the clearance of the site – if (for example) further trial holes are to be installed, a clear site allows free access for trial pitting or undertaking window sampling. I would not

wish to see commencement of construction (for example while lab sample results are pending) as this could hamper any additional remedial works that may be deemed to be necessary, or could serve to mobilise contamination & increase it's dispersal. For this reason, a pre-commencement element restricting the commencement of construction is useful. I'd be happy for the removal of above ground structures & concrete hard-standing, but would prefer to exclude the grubbing up on founds & removal of services until we've a greater certainty of the nature of contamination on site.

I would reiterate that the initial reports are positive (considering previous landuse), and I would hope that some limited additional sampling would confirm the conclusions to be sound. Especially given the proximity of existing residential property, and considering the known potential for serious contamination associated with former gas works, it is considered prudent to be thorough. The remedial measures proposed for the on-site new build (vapour / gas barriers within proposed buildings) are precautionary, and avoid the need to robustly quantify the risk. The same is not true for off-site receptors (property) that are unlikely to benefit from such provisions.

It is possible that a condition wording can be agreed that permits a limited commencement on site whilst some additional data collection is undertaken, without prejudicing the ability to act upon the new information, if necessary. If there is any pre-commencement element to condition wording, the appropriate condition should be kept separate from 'validation' & 'unexpected contamination' conditions in order to facilitate a swift & uncomplicated discharge of the pre-commencement condition. There is no practical reason I can see that would pose a barrier to the rolling of verification & unexpected contamination conditions in to a single condition if it desirable to keep the number of conditions applied to a minimum.

As discussed earlier, I am open to a discussion about the precise wording of the conditions – provided that the impetus to address the concerns raised above (and within my email yesterday), is maintained. I am happy for you to pass my comments on to the applicant / Dig-Geotech, and am of course happy to discuss these issues directly with the applicant and/or their representatives. I've copied in Jeffrey Douglas & David Grant in for convenience, I'm afraid I don't have an address for Nigel Slydell.

Best Regards,

Jon

Jonathan Driver
Environmental Control Officer