To: Ian Ansell

From: Jack Dearman

Date: 2nd September 2019

Your ref: EPF/1471/19

File ref:



Address: 113 Church Hill, Loughton, IG10 1QR

Proposal: Residential development of x10no. apartments with associated

parking and external amenity space. (Revised application to

EPF/0610/18).

Updated memo

The desktop study (DTS) (ref. 1463 R01: Issue 1), dated May 2019, relating to potential contamination issues at the above site has been reviewed and I have the following comments to make regarding its content:

The report satisfactorily addresses the requirements for submission of a desktop study, in that it is signed, countersigned and dated, contains: relevant information of a site walkover performed; background information for the site and surrounding area; a written preliminary conceptual site model (CSM) and risk assessment identifying active contaminant linkages; with conclusions and recommendations.

The preliminary risk assessment has identified potential contaminants of concern and this is supported by council records which show the following historic potentially contaminated land:-

On Site: Milk Depot Potential Medium Risk Adjacent to Site: Petrol Filling Station Potential High Risk

While the site walkover did not identify any significant sources of contamination on site, it did note a stockpiled area of rubble following demolition of previous buildings overlying the proposed development's amenity space area, along with concrete hardstanding, and potential made ground to an estimated depth of 2.0 mbgl, based on nearby historic BGS boreholes. Further, previous investigations had suggested the possibility of underground storage tanks (USTs) along the northern border directly adjacent to the existing petrol filling station (PFS). No landfills have been recorded within 250m of the site boundary. Based on the findings of the preliminary risk assessment potential contaminant linkages have been identified. Low to Medium risks to residential end users have been listed from made ground via the direct contact/ingestion/inhalation of soil pathway, and from VOC vapours (PFS) via the inhalation pathway. Given the unproductive strata of the London Clay risks to groundwater are considered very low. An intrusive site investigation is therefore required to be undertaken and which needs to assess all the potential contaminant linkages identified in the preliminary conceptual site model (CSM) of the desktop study, including undertaking gas monitoring to address risks from potential hydrocarbons and volatile organic compounds (VOCs) from the neighbouring PFS. The proposed site investigation will target surface soils as no pathway via home grown produce relates to this development. No detailed site

memo

investigation methodology was provided, therefore a sampling strategy, including details of gas monitoring, should be submitted to the LPA for approval prior to the undertaking of any site investigation.

After review of the DTS report, the following information is required to be submitted to the Local Planning Authority (LPA) for approval:-

- 1. A sampling strategy is to be submitted to the LPA detailing proposed sampling and gas monitoring locations;
- 2. An intrusive site investigation, as recommended in the DTS, to include ground gas monitoring, to address the contaminant linkages identified in the preliminary CSM;
- 3. A suitably qualified and experienced watching brief is required to identify any unsuspected contamination, in particular asbestos containing material.

Site investigations are to be in accordance with best practice as outlined in BS5930:2015 and BS10175:2011. Soil sampling should be detailed enough to characterise potential contamination at both surface and at depth as such pathways have been identified in the CSM.

Gas monitoring is to be in accordance with best practice as outlined in such documents as BS8576:2013, BS 8485:2015, Claire RB17 and CIRIA C665.

Should the LPA be minded to grant planning permission I would recommend that the following conditions remain on the decision Notice:-

SCN57 - Contaminated Land (PC)

SCN58 - Contaminated Land - Approval of Verification Report

SCN59 - Contaminated Land - Not Previously Identified

Original memo

With reference to the above application:

I have screened readily available records held by the Council for this site including our GIS database and aerial photographs. Due to the site's former use as a **Milk Depot** and the presence of **Made Ground** and a **Repair and Refuelling Station** adjoining to the North, there is the potential for contaminants to be present over all or part of the site.

The proposed residential land use is classed as a high risk and sensitive land use. Therefore, it is noted that in question 6 of the application form 'A proposed use that would be particularly vulnerable to the presence of contamination' have been correctly answered 'yes'.

It is noted a phase 1 geo-environmental investigation has been submitted by GEMCO. This report is due to be sent for review by consultants on the Council's behalf and any feedback will be passed to the applicant.

Due to past and current land use I would therefore recommend that the land contamination conditions SCN57, SCN58, SCN59 be attached to any approval granted.



Reason:- To ensure the risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, in accordance with the guidance contained within the National Planning Policy Framework, policy RP4 of the adopted Local Plan and Alterations, and policy DM 21 of the Epping Forest District Council Local Plan Submission Version 2017.