

Harrison, Liz

From: Panza, Yacklin
Sent: 08 August 2025 15:59
To: Harrison, Liz
Subject: [O/25/99506] Navigator Quarter, Eastleigh, SO18 2NL - Contaminated land comments

Dear Liz,

Thanks for consulting the Pollution Team on the planning application O/25/99506 for the outline application for development of the land adjacent to Southampton Airport to provide employment floorspace of up to 92,000 sqm (GIA) within Use Classes E(g) (ii & iii), B2 and B8 with ancillary offices and areas for service yards, car parking, landscaping, ancillary buildings and associated activities, and access from Wide Lane (all matters reserved except for access). Full planning application for initial infrastructure works and construction of new access road including site levelling and other engineering works.

I have reviewed the following documents in relation contaminated land:

- Geo2 (27/02/2025). Preliminary risk assessment. Navigator Quarter, Southampton. Mitchell Way, SO50 5QJ. Reference 25/4362.A.1. Version 1
- Geo2 (31/03/2025). Preliminary sources study report. Navigator Quarter, Southampton. Mitchell Way, SO50 5QJ. Reference 24/4362.A.2.PSSR
- Geo2 (08/04/2025). Geo-Environmental Assessment. Navigator Quarter, Southampton. Mitchell Way, SO50 5QJ. Reference 25/4362.A.3.GEA
- Impartial Assessment Ltd (27/02/2025). Stage 2 Detailed Explosive Ordnance Risk Assessment. Navigator Quarter, Southampton.
- MPG (20/05/2025). Mineral Resource Assessment. Navigator Quarter – Land adjacent to Southampton Airport. Reference 491/1—R1.2 – MRA. Version 1.2

Preliminary Risk Assessment

The preliminary risk assessment includes a comprehensive site characterisation, including a review of historical maps, summary of previous investigations in the area and initial conceptual site model. Identified on-site potential sources include historical mineral extraction and landfilling, historical farm with potential asbestos within building's fabrics, gravel pits/ infilled ground of unknown composition, RAF/ military use, railway embankment, contamination due to firefighting event in 2002 and oil spillage in 2007 and 2017 (this last one of significant impact and unknown mitigation measures). Off-site sources of contamination identified comprises rail works (including migration of hydrocarbons) and airport (with potential use of PFAS). The potential receptors identified are site users (including construction staff and future site users), underlying aquifers, River Itchen and associated tributaries to the east.

The assessment indicates Low to Moderate risk from on-site potentially contaminated soils or groundwater and ground gas (including radon), and moderate to high risk from potentially contaminated soils/ groundwater from off-site sources (including phase free product identified in September 2023). Intrusive investigation was recommended to assess ground conditions and risk to future site users and controlled waters.

Detailed UXO Report

The UXO report provides a risk site plan, which identifies central areas of the proposed development site as low risk, moderate risk areas to the north and northwest, and low to moderate risk to the southwest. The risk assessment indicates that mitigation measures are in place for areas of low to moderate (i.e. such as staff awareness briefings) and moderate risk (i.e. watching brief by an EOD engineer during any ground investigations, earthworks and excavations within made ground, intrusive magnetometer probe survey).

Geo-Environmental Assessment

The Geo-Environmental assessment includes the findings of a site walkover conducted on 16/01/2025, the review of desk study data, and updated conceptual site model/ qualitative risk assessment.

The site investigation was conducted in February 2025 and comprised No. 4x Cable Percussion Boreholes up to 10mbgl with monitoring well installations, No.12 trial pits up to 3.6mbgl, and No.7 hand dug trial pits up to 1.20mbgl. The assessment focuses on the northern area of the site, along the route of the proposed access road. The ground conditions encountered comprises made ground up to 1.50mbgl within the northwestern area, River Terrace Deposits up to 5.20mbgl, Wittering Formation and London Clay Formation. Olfactory evidence contamination was found at CP103 at 3.20mbgl.

A number of soil samples were collected for environmental testing. Results were compared against GAC 'Commercial' end use scenario. The report indicates that no exceedances were recorded. The report concludes that no significant potential sources of contamination have been identified, and as such the risk to construction staff and future site users is considered to be Very Low to Low across the access road area. I agree with this approach for this specific area. Further investigation across the entire development will be required to determine risk to human health across the wider site.

A total of 4 groundwater samples were collected for environmental analysis. Results indicates that elevated concentrations of Copper and Nickel were detected at CP101, CP102 and CP103 when compared to Water Framework Directive standards. Additional assessment using the Bio-Availability Assessment Tool, indicates that the bioavailable concentration of both contaminants are below the GAC. Elevated concentrations of hydrocarbons were detected at CP103 and CP104 (Aliphatic and aromatic C16-C35), considered of limited mobility. The report indicates that as no evidence of gross volatile contamination was identified, the risk to controlled waters was considered low. Additionally, the report indicates that the risk to controlled water from hydrocarbons (which are understood to be migrating from the rail yard to the north) are being monitored and assessed by a third-party, no further details have been provided on this regard. Clarification on any ongoing investigation and remediation measures to mitigate the impact to controlled waters are required. I consider that the hydrocarbons plume must be delineated and addressed properly as part of this investigation.

A total of 2 rounds of ground gas monitoring has been undertaken so far, indicating that no concentrations of CH₄ have been recorded. CO₂ was recorded above 5% on CP102 and CP104 (maximum of 6.6%), with maximum flow of 0.3l/h. It is understood that the risk from ground gas will be assessed following completion of the monitoring regime. Preliminary assessment indicates CS1 conditions apply.

Based on the above information, whilst I do not have any objection with the principle of the development in terms of contaminated land, I recommend that this planning application is permitted only subject to condition requiring further investigation and assessment of land contamination (including ground gas monitoring across the entire site and groundwater hydrocarbon contamination delineation), and a requirement that appropriate mitigation of any discovered risks be carried out to the satisfaction of the LPA, as necessary. I append conditions to this effect:

Site-Wide Investigation

No work shall commence on site until the following has been submitted to, and approved in writing by the LPA:

- a. An updated report of a site investigation (including coverage of the entire development site -not only the access road), including delineation of hydrocarbon contamination in soils and groundwater - potential off-site plume from the rail depot, risk assessment to human health and controlled waters; and a complete ground gas risk assessment in accordance with UK Land contamination risk management (LCRM) national guidance, and BS10175:2011+A2:2017, and BS 8576:2013 and as agreed with the LPA.
- b. Detailed site-specific scheme for remedial works and measures to be undertaken to avoid the risk from contaminants and/or gases when the site is developed and proposals for future maintenance and monitoring.

Such a scheme shall include nomination of a competent person to oversee the implementation of the works.

Reason: To minimise the risk from land contamination for the safety of the future users of the development and to protect controlled waters.

Verification report

The development hereby permitted shall not be occupied / brought into use until there has been submitted to the LPA verification by the competent person approved under the provisions of condition b (remediation) that any remediation scheme required and approved under the provisions of condition b (remediation) has been implemented fully in accordance with the approved details (unless varied with the written permission of the LPA in advance of implementation).

Unless agreed in writing with the LPA such verification shall comply with UK Land contamination risk management (LCRM) and any other relevant guidance. Typically such a report would comprise:

- a. A description of the site and its background, and summary of relevant site information;
- b. a description of the remediation objectives and remedial works carried out;
- c. verification data, including - data (sample locations/analytical results, as-built drawings of the implemented scheme, photographs of the remediation work in progress, etc.
- d. Certificates demonstrating that imported and/or material left in situ is free from contamination, confirmation of material removal, gas/vapour membranes have been installed correctly.

Thereafter the scheme shall be monitored and maintained in accordance with the scheme approved under condition b (remediation)

Reason: To minimise the risk from land contamination for the safety of the future site users and to protect controlled waters.

Imported soils

Any imported soils required for the development hereby permitted should be demonstrated to be suitable for its intended end use and meet the approval of the Local Planning Authority prior to use on site.

Reason: To minimise the risk from land contamination for the safety of the future site users.

I will also consult the Environment Agency regarding any conditions that may be required to protect groundwater. I trust the above information is of assistance.

Best regards,

Yacklin

Yacklin Panza

Pollution Control Specialist

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