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Mr Jonathan Driver
Environmental Control Officer
Havant Borough Council Environmental Health
Public Service Plaza
Civic Centre Road
Havant
Hants PO9 2AX

AlpineHomes/Yachthaven/Topsoil

1 July 2022

Email only to: jonathan.driver@havant.gov.uk

Dear Mr Driver,

YACHTHAVEN, HAYLING ISLAND, APP/13/00317
Topsoil Analysis Results

Further to your email of 24 June 2022 to David Eaves regarding the above (which was copied to us), we note your observation that according to the test certificate from the topsoil supplier, the sample analysis indicated that the topsoil sample tested has a concentration of the PAH congener Dibenzo(a,h)anthracene exceeding the published LQM/CIEH threshold for a residential with home grown produce land use.

In order to check whether the topsoil supplied and placed in the garden areas of the Yachthaven development also contained Dibenzo(a,h)anthracene at concentrations exceeding the published threshold for residential with home grown produce land use, topsoil samples were taken from the seven garden plots within the development (see attached sampling plan – locations indicated by red triangles) and sent for analysis to Envirochem Analytical Laboratories Ltd of Fareham. See attached Analysis Report.

The results of the soil sample analysis have been compared with Defra's Category 4 Screening Levels (C4SL, 2014) and the published LQM/CIEH Suitable for Use Levels (S4UL) for Human Health Risk Assessment (2015). Copyright Land Quality Management Limited reproduced with permission; Publication Number: S4UL36001. All rights reserved.

The threshold for Dibenzo(a,h)anthracene for residential with home grown produce land use is 0.24 – 0.30 mg/kg, depending on the soil organic matter (SOM) content.

The concentrations of Dibenzo(a,h)anthracene in all seven topsoil samples were found to be <0.10 mg/kg (i.e. below the limit of detection).

From the above, we would conclude that the topsoil as supplied and placed in the garden areas of the Yachthaven development is not contaminated with Dibenzo(a,h)anthracene.

We trust that the above is of assistance. Please do not hesitate to contact this office should you have any query.

Yours sincerely



Malcolm McKemey
Director

Encs: Sampling Plan
Envirochem Analytical Report dated 29 June 2022.





YACHT HAVEN
EXCLUSIVE WATERSIDE LIVING

Mayflower
Swiftsure
Temeraire
Belle Isle
Resolution
Endurance
Yachthaven House
Offices



Our Ref: 22-30842
Your Ref: PAID

ENVIROCHEM

Analytical Laboratories Ltd.

12 The Gardens
Broadcut, Fareham
Hampshire
PO16 8SS

Tel: (01329) 287777
Fax: (01329) 287755
www.envirochem.co.uk
lab@envirochem.co.uk

Analysis Report

Client: Alpine Homes
Three Oaks
Botley Road
Bishops Waltham
Southampton
SO32 1DR

Sample Details: 7 soil samples

Date report issued: 29 June 2022

Number of pages (including this header): 3

Accreditation

All analytes marked **M** have been analysed under the scope of our MCERTS accreditation

All analytes marked **U** have been analysed under the scope of our UKAS accreditation

All analytes marked **m** have been subcontracted and analysed under the scope of their MCERTS accreditation

All analytes marked **u** have been subcontracted and analysed under the scope of their UKAS accreditation

All results labelled with an asterisk (*) are non-conforming due to incorrect sample storage or handling. The result may be invalid.

All comments are beyond the scope of our accreditation.

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated.

This report shall not be reproduced except in full, without the written approval of Envirochem.

Unless sampled by Envirochem, sample information details are supplied by the client.

Uncertainty of measurement is not accounted for in reported results.



Dan Dockree

Authorised Signatory

Signed on behalf of Envirochem by an authorised signatory



Client: Alpine Homes
Sample: Not Supplied

Sampled By: Client
Date Received: 17 June 2022
Submitted By: Client

Envirochem Job No. 22-30842
Date Completed: 28 June 2022
Date Issued: 29 June 2022

Analysis Report

Sample Results				Analysis	
Lab Sample No.	Sample Description	Sample Details	Detection Limit (mg/kg)	Sample Type	Dibenzo(a,h)anthracene (DhA) Content (mg/kg)
97008	/ / no samp. time	Plot 1	Soil - Sandy loam	8.8	< 0.10
97009	/ / no samp. time	Plot 2	Soil - Sandy loam	9.7	< 0.10
97010	/ / no samp. time	Plot 3	Soil - Sandy loam	11.1	< 0.10
97011	/ / no samp. time	Plot 4	Soil - Sandy loam	4.2	< 0.10
97012	/ / no samp. time	Plot 5	Soil - Sandy loam	8.9	< 0.10
97013	/ / no samp. time	Plot 6	Soil - Sandy loam	7.6	< 0.10
97014	/ / no samp. time	Plot 7	Soil - Sandy loam	13.3	< 0.10



Method Summaries:-

Method Summaries (Soils/ sludges/ solid wastes)

- 5.01 - Soil sample pre-treatment, air-drying, crushing, sieving and subdividing
- 5.02 - Solvent extraction (acetone/heptane) of soils for hydrocarbon analyses
- 5.04 - Aqueous leaching of soil and waste samples
- 5.05 - Soil texture classification
- 5.06 - Aqueous extraction of dried soils/sludges/waste in a ration of 2.5:1
- 5.18 - Digestion of solid samples in aqua-regia using hot-block for metals analysis
- 6.01 - Gravimetric determination of water content of solid samples by oven drying at 105°C.
- 6.02 - Determination of anions by ion chromatography
- 6.03 - Determination of pH in aqueous samples and extracts by pH electrode.
- 6.04 - Determination of petroleum hydrocarbons by Gas chromatography of solvent extracts (FID)
- 6.05 - Determination of poly-aromatic- hydrocarbons by gas chromatography linked mass spectrometry (GC-MS)
- 6.06 - Determination of poly-chlorinated-biphenyls (PCBs) by gas chromatography linked mass spectrometry (GC-MS)
- 6.07 - Determination of dissolved organic carbon (DOC) and total organic carbon (TOC) by furnace combustion and infra-red detection of carbon dioxide.
- 6.08 - Determination of metals in digests and leachates by inductively coupled plasma optical emission spectrophotometry (ICP-OES)
- 6.09 - Determination of loss on ignition by gravimetry and combustion in muffle furnace

Method Summaries (water samples)

- 5.07 - Pretreatment of water samples prior to metals analysis, including acidification
- 5.09 - Solvent extraction (acetone/heptane) of waters for hydrocarbons analyses
- 6.02 - Determination of anions by ion chromatography
- 6.03 - Determination of pH in aqueous samples and extracts by pH electrode.
- 6.04 - Determination of TPH by Gas chromatography of solvent extracts (FID)
- 6.05 - Determination of poly-aromatic- hydrocarbons by gas chromatography linked mass spectrometry (GC-MS)
- 6.06 - Determination of poly-chlorinated-biphenyls (PCBs) by gas chromatography linked mass spectrometry (GC-MS)
- 6.07 - Determination of dissolved organic carbon (DOC) by furnace combustion and infra-red detection of carbon dioxide.
- 6.08 - Determination of metals in solution by inductively coupled plasma optical emission spectrophotometry (ICP-OES)
- 6.10 - Determination of suspended solids by filtration, drying at 103°C and gravimetry.
- 6.19 - Colorimetric tests

SUBCON - analysis that has been subcontracted