

Schedule 2

ENVIRONMENTAL PROPERTY REPORT

35 FALKLAND ROAD

London Borough of Camden

Report on No. 35 Falkland Road, Kentish Town

Site Investigation Factual Report Project Reference : ME/04/5241	Dated : February 2005
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1.0 SUMMARY

This report is intended to provide residents with information relating to the investigation carried out by Mayer Environmental. The analytical data obtained by Mayer Environmental Ltd following the sampling and analysis of garden soils at No. 35 Falkland Road has been compared to the historical analytical data obtained during previous site investigations. The results of the current analytical testing are consistent with data yielded from the previous investigations. The results of the recent sampling show that the garden soil is contaminated with metals (arsenic, lead, mercury, copper and zinc) and poly aromatic hydrocarbons (PAH's).

Based upon the analytical evidence and interpretation against current UK Guidance and Legislation, we consider that this garden is in such a condition, by reason of substances (arsenic, lead, copper, zinc and PAH's) in, and under the land that it meets the statutory definition that there is a significant possibility of significant harm* being caused.

Therefore; according to Section 78A Part IIa EPA 90 (section 57 Environment Act 1995), the Local Authority (London Borough of Camden) may decide to designate this garden as 'Contaminated Land'.

**Significant harm is defined by the legislation as – "Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. For these purposes, disease is taken to mean an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments. Mental dysfunction is included only so far as it is attributable to the effects of a pollutant on the body of the person concerned."*

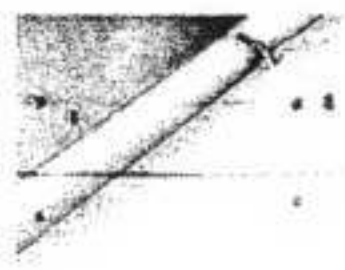
2.0 GARDEN SAMPLING

The rear garden of No 35 Falkland Road was sampled on the 19th October 2004.

3.0 LABORATORY ANALYSIS

The following 4 soil samples taken from the rear garden of the property were selected for laboratory analysis. The samples were tested for lead, arsenic and other contaminants associated with historical use of land, now occupied by the Ash Court Nursing Home.

S2 – Shallow - Topsoil	S3 – Shallow- Topsoil
S3 – Deep – Subsoil	S4 – Shallow - Topsoil



4.0 STATISTICAL ANALYSIS (MAXIMUM AND MINIMUM LEVELS)

The Government has developed Soil Guideline Values (SGVs) for residential properties. The Soil Guideline Values represent intervention values.

When a concentration of contaminant found in a garden is higher than its SGV, then there is a potentially significant risk to the health of people living on that property. However, this does not mean that there is definitely a risk occurring at that time.

UK Best Practice for carrying out Human Health Risk Assessments requires the use of statistical tests to be carried out on the soil sample results to confirm whether there may be a significant possibility of significant harm being caused to the residents as a direct result of the contaminant present in the soils. To be able to assess this risk a Mean Value Test has been undertaken on the analytical data from the soil samples taken from each garden.

It is possible that the average (mean) of the sample data may be unrepresentative of the true site average (mean), especially if the sample consists of only a few measurements. Thus, it is desirable to be able to calculate a value for the True Site Mean from the sample data with a high level of confidence, this True Site Mean is then used for comparison against an Environmental Quality Standard (EQS)

The Mean Value Test generates an “upper bound mean” for the contaminant concentration of the site under investigation. The “upper bound” mean is set by a percentile specified by the user. For instance, specifying the 95th percentile of the mean indicates that you can be 95% confident that the true average of the site is not greater than the concentration calculated by the Mean Value Test. Therefore if the Mean Value Test fails (through an exceedance of an SGV or an EQS) there may be a significant possibility of significant harm being caused. Copies of statistical tests are included as Appendix 3 of this report.

5.0 UK BEST PRACTICE SOIL GUIDELINE EXCEEDANCES

Copies of complete laboratory analysis results are contained in Appendix 1. The following table lists those contaminants that have been identified in the rear garden of No 35 Falkland Road that we consider may pose a risk to residents. The concentrations found have been compared against “UK Best Practice” guideline values for soils in residential gardens for each contaminant identified. The Soil Guideline Values appear at the top of each column in the table overleaf.



Elevated results that have exceeded relevant UK best practice guidelines.

Sample location	Arsenic (mg/kg) SGV – 20mg/kg	Lead (mg/kg) SGV – 450mg/kg	Zinc (mg/kg) EQS – 300*mg/kg	Copper (mg/kg) EQS 130*mg/kg	Mercury (mg/kg) EQS 1* mg/kg	Poly-aromatic Hydrocarbons (mg/kg) EQS – 10*mg/kg	Benzo-a pyrene (mg/kg) EQS- 2*mg/kg
S2 (Shallow)	22.1	3131.5	1364.9	191.9	1.4	41.2	3.575
S3 (Shallow)	20.2	1977	761.1	154.8	1.2		
S3 (Deep)	21.8	896.4	569.1	140.9	1.5		
S4 (Shallow)	23.1	2656	1408.9	436.6	3.0		

Note: *Compared to an Environmental Quality Standard (EQS) as no CLEA Soil Guideline Values (SGV) exist yet for these contaminants.

6.0 SCOPE

On any site, and in particular on sites of potentially contaminative previous uses, ground conditions can change rapidly over short distances and there may be differences in ground conditions between exploratory positions. No responsibility can therefore be accepted for ground conditions that have not been revealed by this site investigation.

Site assessments can range from limited observations to extensive investigations and testing. The degree of uncertainty in interpreting a site's environmental condition will depend upon the budget and scope of work authorised by the client. Some degree of uncertainty will always exist.

This report has been prepared solely for the benefit of our client, London Borough of Camden, for the purpose of characterising the site's environmental condition.

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