

Written statement for the inspection of Avondale Park Gardens under Part 2A of the Environmental Protection Act 1990

1. Introduction

This document provides a written statement, as required by Section 5.2 of the Contaminated Land Statutory Guidance 2012 and records the decision by the Royal Borough of Kensington and Chelsea ('The Council') for managed public open space used as a communal garden at Avondale Park Gardens (see Figure 1) under the provisions of contaminated land legislation that came into force in 2000 as Part 2A of the Environmental Protection Act 1990 (as amended) (Part 2A).

In coming to a decision, the Council has considered the investigation and assessment undertaken by AECOM, which is fully reported in the Part 2A Investigation: Treadgold House and Avondale Park Gardens report dated 5 September 2022, which presents the factual and interpretive aspects of the investigation and risk assessment. The final report is available on the Council's website <https://www.rbkc.gov.uk/soil-investigations>.

This work followed on from the two stages of additional environmental checks carried out by AECOM in the area following the Grenfell Tower fire. Stage 2 confirmed that the Grenfell Tower fire did not result in contaminated land. The final reports and other information for the previous works are available at <https://www.gov.uk/guidance/grenfell-environmental-checks-stage-2-report>. This work is therefore separate from the Environmental Checks Programme and forms part of the Council's normal statutory duties to investigate land which may be contaminated through historic use or activity.

2. Decision

As part of its duties under Part 2A, the Council inspected a managed public open space used as a communal garden at Avondale Park Gardens and based on this assessment has decided it does not pose a significant possibility of significant harm for the public open space use and so does not meet the definition of contaminated land under Part 2A. The basis for reaching this decision is given below.

The Statutory Guidance supporting Part 2A describes four categories of land:

- Categories 1 and 2 encompass land which poses a significant possibility of significant harm and represents a high risk, resulting in land being formally declared as contaminated land under Part 2A.
- Category 3 is land where the risks are not low, but nonetheless the [local] authority considers that regulatory intervention under Part 2A is not warranted.
- Category 4 is land posing no or a low risk.

The Council has decided that the communal garden land at Avondale Park Gardens should be placed into Category 4 on the basis that it poses a low risk to human health for its use as public open space. It is the Council's opinion that the risk from lead at Avondale Park Gardens is well within Category 4 and well below the boundary of low risk and Category 3. The Council therefore considers the risks from lead to be low.

3. Summary of site investigation and risk assessment work

The Council commissioned AECOM to undertake site investigation and risk assessment at Avondale Park Gardens, an area of managed public open space used as a communal garden, as elevated lead concentrations in soil were found during the Stage 2 of the Environmental Checks Programme. The work was carried out during the period October 2021 to September 2022 and was overseen by The Council and the National Quality Mark Scheme Suitably Qualified Person (SQP) who oversaw Stage 1 and Stage 2 of the Environmental Checks Programme. The work was also reviewed by the Multi-Agency Partnership, which was made up of representatives of several organisations including the government, Environment Agency, the UK Health Security Agency, Food Standards Agency and the Council.

The works at Avondale Park Gardens investigated the risks posed by lead and other soil contaminants from historic sources unrelated to the fire. The works included:

- A walkover survey to agree sampling locations and understand how the land is used.
- Collecting 38 soil samples from 16 hand pit locations.
- Testing all soil samples for lead and selected samples for a range of other heavy metals, polyaromatic hydrocarbons and asbestos.
- Assessing the risk to human health in accordance with Part 2A.

Figure 1 shows the locations of sampling locations at Avondale Park Gardens. Table 1 summarises the results of analyses for lead.

Table 1: Summary of lead analyses results

	Number of results	Screening criteria (POSresi)	Minimum mg/kg	Median mg/kg	Maximum mg/kg	Arithmetic Mean mg/kg	Geometric Mean mg/kg
All samples	38		381	686	2099	757	717
All samples (excluding APG111 & APG113)	33		381	673	2099	762	719
0.05m	17	Stage 2 Env. Checks criteria: GSC = 630 mg/kg Step 1 SSAC = 710 mg/kg Part 2A Investigation: Sensitivity analyses = 946 mg/kg	519	765	2099	854	804
0.05m (excluding APG111 & APG113)	15		519	763	2099	860	802
0.1-0.2m	15		509	668	1027	694	681
0.1-0.2m (excluding APG111 & APG113)	13		506	668	1027	685	672
0.05 & 0.1-0.2m	32		506	707	2099	779	744
0.05 & 0.1-0.2m (excluding APG111 & APG113)	28		506	686	2099	778	739
0.5-0.6m	4		381	705	1038	707	646
0.5-0.6m (excluding APG113)	3		381	941	1038	787	719
0.9-1.0m	2		394	497	600	497	486

Notes for Table 1:

- a. Statistics were generated including and excluding samples APG111 and APG113, as they were used to target the Stage 1 Environmental Checks sample GTCS 1-23 (a single sample). This is because you are not meant to include targeted sampling when producing non targeted statistics.
- b. Screening criteria used for Avondale Park Gardens were generated during the Stage 2 Environmental Checks following the Grenfell Tower tragedy. As part of the Part 2A Investigation at Avondale Park Gardens, a sensitivity analyses criterion was produced.

The long-term risks to health were assessed by comparing average soil concentrations at various depths across parts of the investigation area that might be used most frequently by residents and the public with generic and, for lead, site specific assessment criteria appropriate for areas of public open space. For statistical reasons, lead was compared with the median and geometric mean, rather than the arithmetic mean. Except for lead, all relevant average contaminant concentrations at Avondale Park Gardens were below generic screening criteria (GSC), meaning the risk was shown to be low.

For lead, with the exception of samples taken at 0.9-1.0m, all relevant averages exceeded the public open space GSC of 630mg/kg and relevant average soil concentrations at several depths also slightly exceeded the conservative Step 1 site specific assessment criterion of 710mg/kg, which was produced for Stage 2 of the Environmental Checks Programme. AECOM undertook a sensitivity analysis, which factored in local conditions, to identify whether these exceedances were significant. This included, for example, accounting for the number of days the open space is likely to be used by residents and the impact this has on the amount of soil that would be ingested by residents using the area. These changes would have resulted in an assessment criterion of 946mg/kg, or higher if other factors had been considered. All of the averages fall below this criterion and so, as a result, lead was considered to pose a low risk at Avondale Park Gardens and further risk assessment to generate site specific acceptability criteria was not required.

AECOM considered short and medium-term risks from lead and found them to be low.

AECOM considered the level of confidence that may be placed on their assessment and conclusions and concluded “that the land does not meet the definition of contaminated land with a high degree of confidence”.

AECOM also identified that the concentrations were “towards the upper end of what is considered normal within the urban environment”, suggesting that the concentrations of lead at Avondale Park Gardens are not uncommon.

4. Conclusions

Overall, for the public open space use at Avondale Park Gardens:

- There is no evidence that the soil contaminants investigated were causing significant harm.
- Both long- and shorter-term risks to health from soil contaminants were found to be low.

- No further action is required to inspect or remediate soil contamination.
- There is a high degree of confidence with these conclusions.

As a result, park users may continue to enjoy Avondale Park Gardens as a managed area of public open space without the need for any special precautions.

If the use of Avondale Park Gardens changes in the future, for example to include the growth of produce within the ground for consumption, the results of the site investigation should be used to ensure that the soil is suitable for use and that any necessary precautions are taken.

LINKS TO FINAL REPORT <https://www.rbkc.gov.uk/soil-investigations>

SQP DECLARATION <https://www.rbkc.gov.uk/media/document/declaration-of-document-adequacy>

