

STATUS AND INTERPRETATION OF TEST RESULTS

Were the tests made by an independent agency and what experience of similar situations have there been?

We appointed Casella Stanger to conduct the sampling of the allotments. Casella Stanger is a reputable environmental consulting firm, which has specialist experience of contaminated land investigations and remediation system design. The Health Protection Agency also uses Casella Stanger.

The samples were analysed by Casella Stanger, and is a UKAS accredited laboratory for most analytic procedures including for lead and arsenic

Was the contamination found in the topsoil or subsoil and how would the depth of samples determine the danger to health?

After discussions with the Food Standards Agency prior to sampling it was decided that samples should be collected within the top 0.0m – 0.3m. This zone is the growing zone and where contaminants, if present in the soils would pose the greatest potential risk to human health. Within this growing zone, produce would be most likely to take up any contaminants present.

To what standards have you applied the readings of contaminated soil that puts them into the category of a definite risk to health?

Concentrations detected have been compared against standard Soil Guidance Values for allotments. Allotments Soil Guidance Values for lead and arsenic are 450mg/kg and 20 mg/kg respectively.

Have tests been undertaken on produce grown on the contaminated sites and if so what were the results, in terms of transmitted contamination and dangers to health?

No tests were conducted on produce grown in the allotments.

There are a number of variables that will determine the uptake of contaminants by produce from the soil, these variables are as follows

1. Plant species, different plant species will exhibit different contaminants uptake rates
2. Soil pH
3. Organic content of the soils
4. Nutrient loading of the soils
5. Nutrient deficiency of the produce

Because of the existence of these variables, it would be impossible to accurately assess the potential risk to human health. Therefore it was decided to err on the side of safety and use published Soil Guidance Values (SGV) for contaminants detected.

The Health Protection Agency agreed with our rationale for using the SGV approach to determining the presence of a potential risk to human health.

How do these results compare with tests taken from productive farmland in rural areas?

It is not accurate to compare results of samples taken in an urban setting with samples collected in rural areas. Samples were collected in Clissold Park to establish the baseline or background concentrations in the Borough of Hackney. Concentrations detected at the allotments varied significantly from concentrations found at Clissold Park, therefore levels detected were not as a result of natural background levels.

Have other local authorities that have had experience of such results been consulted in terms of the implications of these results and the actions suggested by the environmental health department

No other local authority has conducted such an extensive sampling programme of allotments within their respective Boroughs. Therefore it is not possible to compare results and actions taken.

Should produce that has been grown on the contaminated sites (eg potatoes) be destroyed?

All produce grown in Aden Terrace and Queensbridge Road should be destroyed.

As mentioned 5 of the sites have been determined to be partially contaminated, therefore produce grown in parts of those allotments that are not contaminated will be safe to eat. After meeting with Hackney Allotment Society members we will cordon off those affected areas, it will then be obvious to allotment holders who can and can not eat their produce.

Should these sites be closed forthwith?

As an interim-risk management, all allotment holders should follow guidelines provided to us by the Health Protection Agency.

Do

- Continue to enjoy your allotment
- Visit your allotment
- Plant flowers and shrubs
- Cut the grass
- Grow plants in pots (using potting compost) and gro-bags
- Wear gloves when gardening
- Wash your hands after working in the garden and before handling food

Don't

- Eat fruit or vegetables from your allotment
- Plant shrubs or trees that require digging of deep holes
- Let children play with the soil

Why have such tests not been done by the council before now?

The requirement to identify contaminated land has been in force since April 1st 2000. The London Borough of Hackney was unable hire a suitable person to conduct this work until February 2004.

What frequency and kinds of tests are local authorities required to maintain on allotments, smallholdings, farms, etc.?

Local Authorities are required to inspect land that may be contaminated within their respective Boroughs.

Potentially contaminated sites will be identified in a Phase 1 desk top study. The purpose of the Phase 1 Site Investigations is to indicate the presence of a potentially polluting activity at the site under review.

The London Borough of Hackney has adopted this approach, but it has also identified highly sensitive receptor groups such allotments for investigation, irrespective of whether there was a history of industrial activity at the allotment.

IMPLICATIONS FOR OTHER LOCATIONS

It would seem that these conditions could well exist across the Borough, if so will the Council be issuing general warnings to residents and businesses about the potential dangers of contact with soil in gardens and other properties?

As mentioned sites are in the process of being prioritised throughout the Borough. We reviewed current land use in the Borough of Hackney and identified the allotments as being used by a sensitive group, those eating produce. Through time fire ash has been used at allotments sites to improve soil quality, those allotments holders were unaware of the potential contamination that could result. Therefore we felt that it was important that we sampled the allotments first to determine the presence of a risk.

What other relevant instances have there been of contamination in this or comparable Boroughs?

Contamination has been identified in other Boroughs.

What actions were taken in these cases?

Sites have been remediated, and the potential risks to human health removed.

Has the GLA been consulted or informed of these results regarding its London wide responsibilities?

The GLA has not been informed; however we will inform them in due course so they are aware of the issue. There is however no obligation to do so.

HEALTH IMPLICATIONS

With a contamination as dangerous and immediate as the environmental health officer's advice suggests, what harm might there already have been to allotment users and to those who have consumed produce grown on these sites?

I have forward this question to the Health Protection Agency Representative for them to answer, when I receive the answer I will forward to all those members of the Executive Committee.

The Health Protection Agency Representative will attend the meeting to be scheduled with all allotment holders.

If allotment holders and those who may have consumed allotment produce consider that they have been put at some risk, who would be answerable to them and on whom would liability fall?

As this stage of the process it is not possible to determine who is liable for the remediation of the contamination that was found

BACKGROUND INFORMATION

As one example, the Aden Terrace site has been continuously cultivated as allotments for over 30 years. Would this contamination have existed throughout this time?

Until further site investigations are completed, it is difficult to determine when or how contamination could have been introduced to the allotment sites.

The soil at the site at the Spring Lane site was tested about 7 years ago and found to be safe for allotment use. Why would such a dramatic change occur since then?

I can not comment on these results before I have reviewed the report

1. The sampling methodology adopted
2. The reference concentrations against which the results were compared. CLEA Soil Guidance Values which were used in this programme were not in use 7 years ago.
3. Whether the samples were analysed in a UKAS accredited laboratory

The Leaside Road site is not in either of your lists. What is its status?

This allotment should have been included in the list of partially contaminated allotments

The list of partially contaminated sites should have read:

- Spring Lane
- Spring Hill
- Church Walk
- Springdale Road
- Leaside Road