



Grenfell environmental checks – 20 October’s virtual community event, the Stage 2 design, next steps and the soil sampling

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In summary:

- At our virtual community event on 20 October residents had the opportunity to ask the scientists their questions about the design of Stage 2 of the environmental checks involving the main investigation and soil sampling around the Grenfell Tower site.
- You can watch a video of the event on YouTube at: https://youtu.be/mU5_cz4vi28 and see a summary of the questions and answers in this community update below.
- Following the community event the [Stage 2 design](#) and the [review of combustion related fire products](#) were both published on GOV.UK.
- The Stage 2 soil sampling started on the **22 October** and will take place until **the 20 November**. In response to feedback, the initial focus was on schools and nurseries during the half term holidays.
- We were keen for you to continue to be able to observe the sampling taking place and changed our approach in-line with the new national restrictions. Keeping everyone safe is our priority.

Stage 1 of the two-stage environmental checks into potential land contamination around the Grenfell Tower site was carried out in spring and summer 2019. A [full report on the results](#) was published in October 2019 and exploratory soil sampling and a pilot study indicated that the levels of chemicals found in the soil were consistent with those generally found in London and that there was no increased risk to health from land contamination because of the Grenfell Tower fire.

To reduce uncertainty about any health risks, Stage 2 will involve an investigation of the area involving more detailed soil sampling. The results will be used to consider any possible risks to public health. You can find out more below.

Virtual community event

Our second Grenfell environmental checks virtual community event took place on Tuesday 20 October. The panel comprised of:

- Professor Alan Penn, Chief Scientific Adviser – Ministry of Housing, Communities and Local Government
- Professor Gideon Henderson, Chief Scientific Adviser – Department for Environment, Food and Rural Affairs
- David Dyson, Project Manager – AECOM

- Dr Paul Nathanail – the independent Suitably Qualified Person
- Chris Maughan, Head of Grenfell Recovery – MHCLG

For the question and answer section the panel were joined by Mary Mullix, Director of North Kensington Health Recovery, North West London Clinical Commissioning Group and Dr David Mortimer, Food Standards Agency.

Nineteen people took part in the event and the panel received 24 questions on the day and two in advance. A summary of the questions and answers is below.

If you have a question now for one of the scientists you can email the environmental-checks@communities.gov.uk inbox. Your email will be forwarded to the appropriate scientist for a response from them. The question and answer will also be shared in the next community update so that other residents can see it.

Stage 2 detailed design

This sets out AECOM's approach to Stage 2 including where they will take samples; how many samples they will take; at what depth and what chemicals they will test for. The multi-agency partnership (MAP) have reviewed and agreed the design. The chief scientific advisers and the Science Advisory Group (SAG) have also reviewed the design and support the approach outlined. Information from the detailed design is outlined below and you can see the full report on GOV.UK (please click on the link in the summary above).

There are 39 areas where samples will be taken. These are:

Schools and nurseries (13)

Latymer Alternative Provision Academy	Burlington Danes School
Bassett House School (St Helen's Church)	Thomas Jones Primary School
All Saints Catholic College	Barlby Primary School
St Francis of Assisi Primary School	St Anne's and Avondale Park School and Nursery
Oxford Gardens Primary School	Grenfell Creche and nursery
Golborne and Maxilla Children's Centre	New Studio Pre-school
Forest School	
St Quintin Children and Family Centre	

Community kitchen gardens and allotments (6)

Longstone Avenue allotments	St Quintin community kitchen garden
St Charles Centre for Health and Wellbeing	Equal People
Portland Road and Nottingwood House	The Grove

Combined community kitchen gardens and public open spaces (9)

Eynham Road	Hurstway, Grenfell, Testerton and Barandon Walks
Henry Dickens Court	Allom and Barlow House
Silchester East	Bramley House
Morland House and Talbot Grove House	Treadgold House
Kensington Memorial Park	

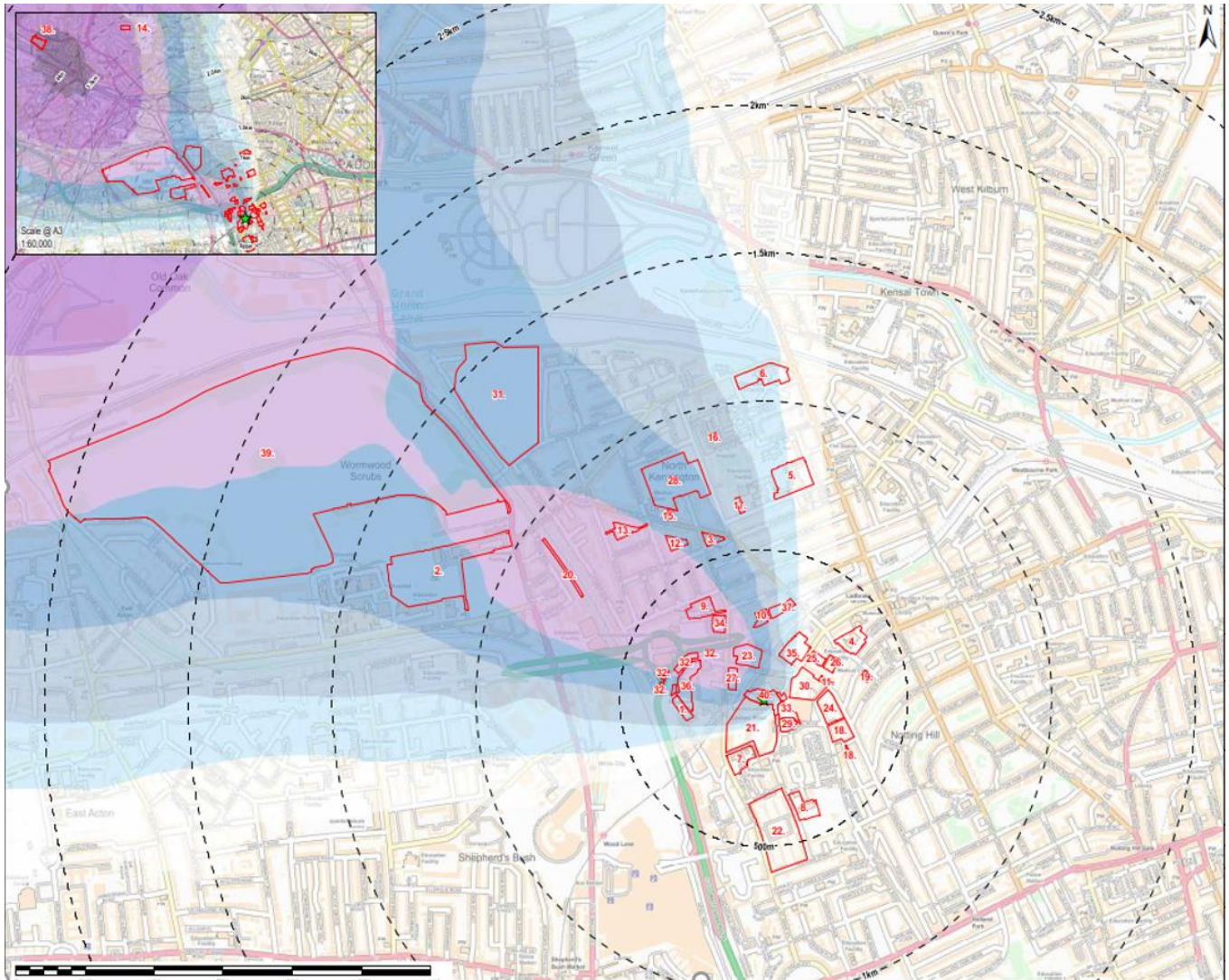
Public open space (10)

Verity Close	Little Wormwood Scrubs
Darfield Way	Lancaster Green
Robinson House	Wesley Square
Silchester West	Maxilla Gardens
Stonebridge Park	Wormwood Scrubs

Currently inaccessible public open space (1)

Within the Tower cordon

You can see from the map below that most of the sampling areas (24) are within 500m of the Tower (inside the first circle) and 12 are within 500m–1.5km of the Tower (the next three circles), where residents found debris and the direction of the smoke plume. Three locations are beyond 1.5km in the direction of the smoke plume and where the Met Office predicted relatively higher smoke and ash particles may have been deposited (the separate map in the top left-hand corner).



The soil sampling will involve:

- Collecting **a total of 440 samples including 22 duplicates.**
- Taking **10 soil samples** from each area (except Kensington Memorial Park where they will collect 20 samples and Equal People and St Charles Hospital where they will take five at each area).
- Most samples will be taken from either 0–2cm or 0–5cm, and some from 0–20cm.
- In **six areas samples** will be collected at 3 depths from 0-2cm, 0-20cm and 50-60cm.
- The samples will be taken from a variety of locations, including turf or grassed locations, flower beds, bare soil, and raised beds.

There will be a three-tiered approach to the chemicals that are tested for:

Tier 1

All the samples will be tested for lead, poly-cyclic aromatic hydrocarbons (PAHs) and asbestos – these are the chemicals identified as being of most concern following Stage 1.

Tier 2

2 in 10 of the soil samples will be tested for dioxins, furans and dioxin-like PCBs as well as antimony – dioxins are an extra marker for fire effluents and antimony was identified by the independent academic combustion related fire products review. The review was recommended by the independent SAG to ensure potential chemical links between the fire and land contamination had been fully considered. You can find the review on GOV.UK and the link is above in the summary.

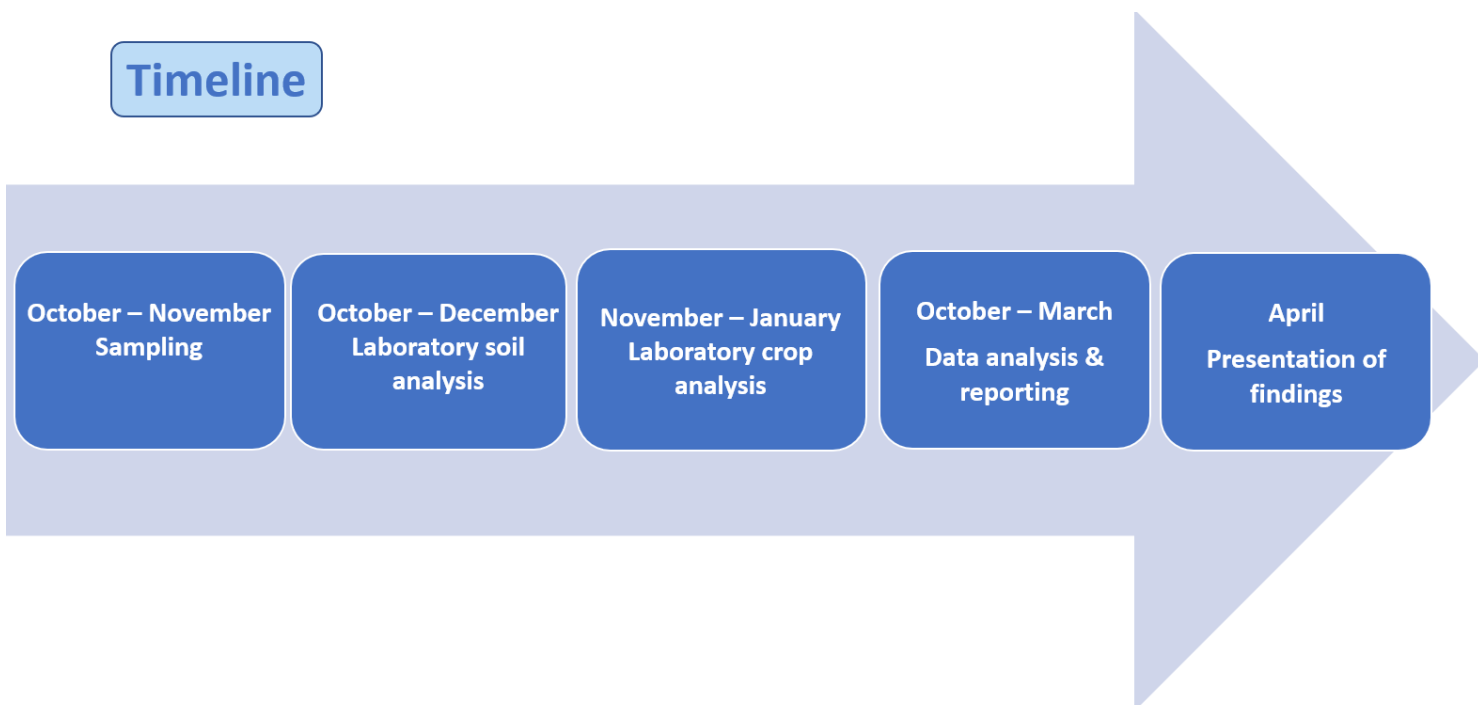
Tier 3

A total of 20 samples from within the Tower cordon, Longstone Avenue allotments and Stonebridge Park will be tested for all potential fire effluents identified at Stage 1 (plus antimony as recommended by the independent combustion related fire products review).

In addition to the soil sampling, we have collected 59 crop and paired soil samples from 11 areas with grower's permission. This was done during September, ahead of the growing season ending. Initially, 35 crop/soil pairs will be tested for lead and PAHs.

Next steps and opportunities to be involved

A timeline showing what will happen next is below:



The soil sampling is now taking place and will continue until the 20 November. The initial focus of the sampling has been on schools and nurseries, during the October half-term. We have been working with community fruit and vegetable growers, residents' associations and community groups to agree arrangements for the sampling to take place and for opportunities to observe the sampling.

Keeping everyone safe is our priority and we have adapted our approach in-line with the national restrictions on COVID-19. Our approach is:

- As many of the sampling areas are visible you may be able to see the sampling taking place either from the safety of your home or while you are out on a walk, going to the shops etc. We will maintain social distancing and wear facemasks.
- We will send out regular emails updating you on the progress of the sampling, including photos, and let you know where sampling will be taking place and when. You can also call the environmental checks team 0303 444 9086 to find out where we are or to ask any questions.

Questions and answers

Thank you very much to all of you who submitted questions to the scientists at the virtual community event. Below is a summary of the questions and answers that we received on the day, which have been grouped under the following headings:

- Environmental checks
- Growing fruit and vegetables
- Health
- Additional questions

Environmental checks

Q. Can residents watch the sampling take place? What happens if the guidelines change?

We want residents to have the opportunity to observe the sampling and have been working with community growers, residents' associations and community groups on opportunities to do this.

Following the introduction of the new national restrictions from Thursday 5 November, we have adapted our approach. See next steps and opportunities to be involved above. Keeping everyone safe will be our priority.

Q. Are the environmental checks only looking at the impact on our health from the soil?

Yes. We are investigating the potential risk of land contamination as a result of the fire following a statutory process under [Part 2A of the Environmental Protection Act 1990](#). This will lead to a detailed health and environmental risk assessment. Any risks to public health from contaminants in the soil will be fully assessed and appropriate action taken.

Q. Are there any chemicals that you tested for in Stage 1 that you are not testing for in Stage 2?

The Stage 2 investigation will focus on the chemicals where a potential contaminant linkage was found during Stage 1. These are lead and polycyclic aromatic hydrocarbons (PAHs). Asbestos is also being included to reduce the uncertainty in the Stage 1 data for this substance. Dioxins and furans will also be included to ensure further investigation of chemicals associated with building fires. In addition, the independent review into combustion related fire products identified antimony and carbon disulphide as chemicals of potential concern (COPCs). Antimony will now be added to the sampling suite. The laboratory can retrospectively analyse the Stage 1 samples for carbon disulphide.

At three areas (within the Tower cordon, Longstone Avenue allotments and Stonebridge Park) the full list of chemicals from Stage 1 including metals, fire retardant chemicals, isocyanates and other organic compounds identified by the combustion related fire products review, plus antimony and carbon disulphide will be tested.

Q. Why aren't you sampling at deeper depths across all the samples?

The chemicals being investigated are unlikely to have moved in the three years since the fire, due to their low mobility and will be on or close to the surface. Therefore, most of the soil samples will be taken at 2cm. Where this is not possible, for example due to thick turf or flower beds, the sample will be taken at 5cm. Where fruit and vegetables are grown the samples will be taken at up to 20cm.

A subset of samples will also be taken at three depth intervals of up to 2 or 5cm, 20cm and 60cm in five of the sampling areas.

Q. Does the sample data that the scientists have gathered reflect the chemicals in the conceptual site model?

The scientists from AECOM are confident that the data will be representative and allow them to understand any uncertainties. They have factored in the mobility of the chemicals being investigated; feedback from residents and the direction of the smoke plume. They have also undertaken a detailed review of fire related chemicals and of historic contamination in the area, which could be a factor in the results.

The Defra chief scientific adviser has advised that the distribution of the sampling sites and where they are in relation to the known debris and smoke plume modelling is appropriate. He also advised that the sampling depths reflect the lack of mobility of the chemicals being investigated, although to take some deeper samples is sensible and appropriate.

Q. Which areas are you still testing for flame retardants and why?

The full list of chemicals from Stage 1, including metals, fire retardant chemicals, isocyanates and other organic compounds identified by the combustion related fire products review, plus antimony and carbon disulphide will be tested with the Tower cordon, at Longstone Avenue allotments and Stonebridge Park. This will fill data gaps from Stage 1 from within the Tower cordon and at locations more distant from the Tower, where deposition from the smoke plume may be higher.

Q. Why are we looking at the soil now, three years after the fire?

Government has committed that any environmental risks to public health will be fully assessed and appropriate action taken, if needed. Due to their low mobility, the chemicals that are being investigated are unlikely to have moved since the fire. The samples will be taken from where residents found debris as well as the direction of the wind and the smoke plume.

Q. Is a Part 2A investigation into potential soil contamination now the right approach, or should a more holistic approach be taken?

A Part 2A investigation is the relevant legislation to look at any possible contamination in the soil and the level of risk. Our approach goes beyond the strict requirements of Part 2A, and both MAP and the SAG believe it is the right approach. The investigation does take a holistic approach as it looks at both cause and effect, including the potential long-term health risks from possible exposure to contamination in soil.

Q. Given the Stage 1 results, is the rationale for Stage 2 to reassure the community?

Following the results of the Stage 1 exploratory sampling, we committed to continuing with Stage 2 to continue to investigate the potential for soil contamination, mainly focusing on those chemicals that exceeded the screening levels. The results of Stage 2 will be used to consider any potential risk to public health.

Q. Will Stage 2 look at the debris people found in their gardens?

The investigation is looking at whether the soil is contaminated as a result of the fire and the possible long-term health risks. It does not include testing any debris that fell from the Tower as this would not provide a reliable assessment of the chemicals now in the soil and that you may be coming into contact with on a regular basis.

Q. Why don't you replicate Professor Stec's findings?

Professor Stec's findings, as well as other independent soil testing carried out locally, have fed into our programme. Her research was preliminary and stated that further analysis of the area around the Tower is necessary to understand the potential health risks. That is what we are doing.

Q. Can we have the results of the testing from within the Tower?

The results from the exploratory soil sampling within the Tower cordon were included in the Stage 1 results. In addition, Public Health England (PHE) publish [weekly reports on the air quality](#) in the area surrounding Grenfell Tower. This has not identified any causes of concern.

A further report contains [PHE's evaluation of asbestos air sampling](#) taken at the Grenfell Tower site between November 2018 and June 2019. This is the timeframe in which sealed bags, containing material from inside the Tower, were transferred from the Grenfell Tower site garages to secure containers on Grenfell Road. While there is no safe level of asbestos and exposures should be kept as low as possible, PHE consider that that additional risks to public health from the storage and movement of the bags of material would be low.

Growing fruit and vegetables

Q. Is it safe to eat fruit and vegetables that are grown locally?

Yes, the advice on growing fruit and vegetables has been reviewed by the Food Standards Agency and has not changed. The advice remains to follow normal practice and to wash your hands after gardening, working or playing in soil, and wash (and peel where you would normally do so) home-grown fruit and vegetables to remove any soil.

Q. Why is the crop analysis being done after the soil analysis?

This is simply to do with the laboratory timescales and the duration of the testing for the fruit and vegetables, which means the results will be back later than the soil results.

Health

Q. Is our health being monitored for any health issues, for example from what residents breathed in after the fire or from the soil, that may emerge at a much later date?

Yes, Public Health RBKC will be surveying the health and wellbeing of residents using national and local data to understand and map out any emerging health trends across the community to monitor the long-term impacts of the Grenfell Tower fire.

Q. Does the health offer consider the views of the community?

Health partners have carried out extensive engagement with the community and remain open to hearing views from residents. The team is happy to meet with members of the community to continue to understand their needs.

Q. Can we have testing for toxicity and contaminants?

Yes. The NHS has commissioned services from toxicology specialists at Guy's and St Thomas' Hospital. These services can be accessed via referral from local GPs, if anyone has any concerns relating to toxicity.

Additional Questions

Q. Will the community be able to meet the Science Advisory Group?

The Chief Scientific Advisers will provide the day to day scientific oversight of the environmental checks during Stage 2. The SAG will continue to quality check the scientific approach, testing process and analysis of the results at each stage and supports the approach outlined in the Stage 2 design. If you want to ask any of the scientists a question, please email the environmental checks inbox.

Contact us

You can contact us to find out more about the environmental checks:

- Email the team on: environmental-checks@communities.gov.uk
- Call the team on **03034 449 086**
- Download the Nextdoor app or visit www.nextdoor.co.uk and search for **Grenfell Community Updates – HM Government**.
- The Stage 1 report, guide to the environmental checks and meet the scientists leaflet can all be found at: <https://www.gov.uk/guidance/soil-and-environmental-checks>

16 November 2020