

## Government Chemist Programme Expert Group Meeting

Monday 20 May 2024

LGC, Queens Road, Teddington, Middlesex TW11 0LY

### Attendees:

<u>PEG</u> Bhavna Parmar Brenda McRory David Pickering Declan Naughton Diane Turner John L Collins Jonathon Griffin Kasia Kazimierczak Paul Berryman Simon Branch Sophie Rollinson  <u>Observers</u> David Skelton	<u>DSIT</u> James Shapland Steph Foster Maria Turner  <u>LGC</u> Amber Meredith Caroline Pritchard Christopher Hopley Elena Sanchez Heidi Goenaga-Infante Ian Axford John Black Julian Braybrook Kirstin Gray Malcolm Burns Nazneen Malik Paul Hancock Selvarani Elahi Tabatha Hambidge Tim Wilkes
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Apologies: Paul Hancock (LGC), Chelvi Leonard

### 1. **Welcome & minutes of the last meeting:**

- 1.1 A PEG member opened with welcoming attendees and PEG members and reminded all those present of the usual housekeeping.
- 1.2 It was noted that a member of the FSA has left their role as PEG member following change of position and welcomed a new PEG member from the FSA as current replacement.
- 1.3 Minutes from the previous GC PEG meeting (December 2023) were approved.

### 2. **Review of actions and matters arising from previous meetings:**

- 2.1 **Action 1:** GC to update the PEG member section of the GC website. **Action ongoing;** awaiting updated biographies from some PEG members (**ACTION 1**).
- 2.2 **Action 2:** A PEG member suggested that he could look at the number of samples taken by authorities. **Action completed:** A PEG member emailed GC staff directing them to the FSA report "Update on GB Official Laboratories Capability building", highlighting a significant drop in sampling during the pandemic.

- 2.3 A GC staff member highlighted the need to look at future trends.
- 2.4 A PEG member mentioned that the FSS had been asked to provide comparable data for a report being collated by Defra and cited a food security report for some existing FSA data of sampling trends over the years. Two PEG members will discuss further offline.
- 2.5 A PEG member commented that the port authorities are focused on statutory sampling but highlighted a lack of staff for additional sampling. Recruitment is underway.
- 2.6 **Action 3:** A GC staff member suggested that the Government Chemist investigate producing a note for defence laboratories. Government Chemist team to discuss internally. **Action completed:** GC team discussed internally and have advised the NRL to reissue guidance, particularly around ensuring slurry ratios are accounted for.
- 2.7 **Action 4:** LGC to circulate a Doodle Poll for the Spring 2024 meeting. **Action completed.**

### 3. DSIT Update

- 3.1 The DSIT presentation (slides circulated with these minutes) summarised the following:
- 3.2 Spending Review: no news on when this will take place, but DSIT are currently in preparation mode.
- 3.3 NPL PEG Conference – to be held on 13-14 June.
- 3.4 Working across Whitehall – DSIT have seen an increase in requests for joint projects with other departments.
- 3.5 Engineering Biology Vision published Dec 2023 with specific reference to the work of LGC and NPL in developing standards.
- 3.6 in July, DSIT will welcome the department's first Chief Scientific Adviser (CSA) who brings over 20 years of experience in engineering and physical sciences.
- 3.7 A PEG member commented that they will be in attendance at the NPL PEG conference and will do his utmost to promote the GC and LGC alongside other non-NPL PEG groups.
- 3.8 A PEG member followed up with the DSIT representative on a previous discussion regarding whether there was the potential to jointly work together on some co-funded GC activities and whether frameworks and MOUs were being considered currently. The DSIT representative replied that current efforts were looking at the new procurement rules coming into force in October, and the contract changes as a result, but will be still assessing the MOU's and how best to coordinate those. The DSIT representative and PEG member will discuss offline (**ACTION 1**).
- 3.9 The DSIT representative commented that they have set up a call with a previous PEG member at the Department for Energy Security and Net Zero (DESNZ) to discuss alignment/opportunities with the NMS.
- 3.10 Recruitment is underway following the announcement that one of the DSIT representatives was leaving.

### 4. GC Update

- 4.1 A GC staff member updated PEG members on the move to Guildford and highlighted that whilst there were some minor delays from the landlord, all LGC plans were currently on track. The current estimated move date is Spring 2025 but should have a clearer picture in June.

## 5. GC2326 Programme Review

- 5.1 The key points of the presentation can be found in the slides circulated with these minutes. Questions and comments are summarised below:
- 5.2 A PEG member highlighted that the EU has brought in a new regulation on honey authenticity coming to effect later this year whereby all honey sold in the EU needs to come from authorised registered premises.
- 5.3 A PEG member commented that this will cause an issue in the UK with local, independent producers facing inordinate expense, having to be registered.
- 5.4 A GC staff member suggested that they will raise this at the next meeting with the FSA, FSS and Defra where honey is discussed.
- 5.5 A PEG member commented that they will check with policy colleagues on the authorised registered premises policy **(ACTION 2)**.
- 5.6 A GC staff member also highlighted another EU regulation on origin labelling requirements for honey, whereby it is no longer accepted to say 'non-EU', and rather it is now required to state which third country it is from; it is currently undecided whether the UK will follow.
- 5.7 A PEG member highlighted the European Packaging and Packaging Waste Regulation (PPWR) which comes into effect in 2030 and will require a certain percentage of all packaging to be made from recycled material. He commented that this could raise a number of issues and asked if it is something that the GC was aware of.
- 5.8 A GC staff member replied that this is something that the GC is aware of and as you recycle more you could see an increase in impurities.
- 5.9 A GC staff member also replied that a new project on packaging under the Metrology Partnership Programme which aims to develop methods to look at contaminants rather than the materials themselves. The GC staff member also highlighted previous GC work which looked at the migration of PET into bottled water and biopolymers (PLA) in recycled coffee cups.
- 5.10 A PEG member commented that the need and want of recycling will increase the level of contamination in new materials and also that the measurement of forever chemicals will become increasingly more important.
- 5.11 A PEG member raised the issue of tyre particles that are leeching into the water supply and that in America, some tyre manufacturers are currently being sued. She also highlighted current work looking at the effects on humans where it is found to accumulate in the liver and asked if this was something the GC was aware of.
- 5.12 A GC staff member recognised there were several chemicals released from a variety of sources that would ultimately make its way into the food chain and the GC will continue to keep a watching brief on this area.

- 5.13 A PEG member asked how the move to Guildford will affect the GC teams and delivery of the Programme.
- 5.14 A GC staff member replied that they were reasonably confident in the timings and current plans include moving schedules with the needs of the different teams being factored in. Plans are also in place to cover UKAS accreditation.
- 5.15 A GC staff member further commented that some teams were easier to relocate than others and there is the possibility to accommodate delivery within the different phases of the move.
- 5.16 A PEG member highlighted that the FSA has previously published a report on allergen testing, mainly looking at ELISAs but also PCR and mass spectrometry and was interested in the type of work being carried out by the GC in relation to PCR.
- 5.17 A GC staff member replied that the GC was looking at melt curve analysis which was used in a previous Referee Case on Mahaleb as part of a weight of evidence approach.
- 5.18 A GC staff member commented that the GC currently uses a range of ELISA, Proteomic and DNA approaches. He further commented that herbs and spices adulteration is currently a big issue and is worth looking at in future programmes.
- 5.19 A PEG member also asked what other types of oil adulteration was being looked at within the programme.
- 5.20 A GC staff member replied that the work being carried out under the current programme is using a rapid deployable test to differentiate between different oils. Further models are being developed to differentiate between different grades of olive oil and adulteration.
- 5.21 A GC staff member commented that this was a screening technology and is being validated using mass spectrometry-based methods.

## **6. Update on GC referee cases**

- 6.1 The key points of the presentation covering the referee cases received can be found in the slides circulated with these minutes. Questions and comments are summarised below.
- 6.2 A PEG member asked how the Port authority knew to sample the frozen Okra for one of the Referee Cases.
- 6.3 A PEG member replied that as part of their statutory function, Port authorities are required to sample a certain percentage of frozen Okra. BM further commented that there is currently an issue within India with pesticides and predicted an upturn in challenges with other spices and products.
- 6.4 A PEG member asked if there was issue with classification of the balls used within bubble tea. If they are being sold separately there is the argument that these could be classed as jelly confectionery, in which case konjak is not allowed, but if part of a drink they could be classed as a decoration.
- 6.5 A GC staff member replied that this needs further discussion.

6.6 A PEG member commented that they are currently waiting on guidance from the FSA regarding classification (confectionary vs decoration) and highlighted that this is an area of concern and there is currently no action on imports.

6.7 A PEG member further commented that this highlights the difficulty of different classifications and there are a number of issues around regulation.

## **7. KPI's & Dissemination Outputs**

7.1 The key points of the presentation can be found in the slides circulated with these minutes. Questions and comments are summarised below:

7.2 A PEG member commented on the success of the 2023 GC conference and the quality of publications produced under the GC Programme.

## **8. CB1: Comparative quantitative review of the sustainability of novel food production methods**

8.1 The key points of the presentation can be found in the slides circulated with these minutes. Questions and comments are summarised below.

8.2 A PEG member highlighted that part of the issue for insect protein was the level of consumption to attain the same level of protein as traditional sources. They further commented how impressive the work being carried out was, given such a small budget and called for further investment to enable the obvious need for more collaborative projects and inclusion of these projects into industries like advanced manufacturing, to be able to satisfy the public's inquiries and curiosity around what, and how food is made, especially in alternative proteins that are using advanced manufacturing and high processing technologies, areas that currently aren't being looked at sufficiently due to budget constraints. A further budget would increase collaboration and opportunities, and the need to look at life sciences and health, from a human, animal and world health perspective had never been greater.

8.3 A PEG member highlighted a recent project run by Fera on testing methods for allergens on alternative protein products which concentrated on precision fermentation and insect protein. They further commented that they will share the review once published (**ACTION 3**).

8.4 A PEG member asked a question on the level of sustainability of kelp farming and raised a concern if it is being harvested but not replaced.

8.5 A GC staff member explained that the figures presented were based on naturally grown kelp, most of which is harvested from the UK shoreline and so the greenhouse emissions were primarily concerned with the harvesting and transportation. They further commented that switching to aquaculture would reduce the associated greenhouse gas emissions.

8.6 A PEG member asked a question on novel food production methods and whether the GC collaborated with the Food Data Transparency Partnership (FDTP) linked initiative to standardise the methodology.

- 8.7 A GC staff member replied that there was no particular collaboration involved or specific sources looked at, more of a global review of the literature focussing on plant precision, fermentation and cultured meat. They also highlighted that they were looking at revenant FSA and Kent Medway reports.
- 8.8 A PEG member also asked whether the traceability of insect proteins was just species traceability or geographical as well.
- 8.9 A GC staff member replied that the primary focus of the work is using DNA approaches for species traceability in the food chain.

## **9. Advancing CBD and controlled cannabinoid measurements for a new matrix CBD reference material**

- 9.1 A PEG member thanked the GC staff member for a topical presentation and commented that they were pleased to see the GC being cutting edge with the analytical techniques being used, further commenting that the enforcement cannot happen until robust systems are put in place.
- 9.2 A PEG member highlighted the collaboration with the FSA on the CBD reference material and asked when the material will be released.
- 9.3 A GC staff member replied that production of the material will start shortly and realistically it will be 12-18 months before the material is ready for sale due to the need to look at both short-term and long-term stability.

## **10. Feedback and questions**

- 10.1 A PEG member highlighted a recent EFSA opinion on mineral hydrocarbons (MOAH) in food and asked if there any methods in place to test for MOAH.
- 10.2 A GC staff member replied that under the Metrology Partnership Programme, there is a new project looking at MOSH/MOAH. He highlighted the challenge of testing in food and that a mixture of oils presents a measurement challenge in terms of the definition of the measurand.
- 10.3 A PEG member commented that there is a challenge in the US in terms of sweets which contain mineral oils. He further commented that Fera have methods for mineral oils, but these haven't been applied to food.
- 10.4 A PEG member thanked the presenters for their presentations and commented that the Programme looks as though it is on track in terms of progress.
- 10.5 A PEG member echoed the quality of the presentations given.
- 10.6 LGC to circulate attributive and non-attributive minutes of the meeting **(ACTION 4)**.
- 10.7 LGC to circulate a poll for the Autumn 2024 meeting **(ACTION 5)**.