



Government Chemist Strategy

2020 - 2023



Department for
Business, Energy
& Industrial Strategy

FUNDED BY BEIS

Government Chemist Strategy 2020 - 2023

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Introduction

This strategy document supports the Government Chemist programme specification for the period 2020 – 2023, which focuses on four strategic aims:

- Protecting consumers in a changing world
- Supporting business and government across the UK
- Maximising UK measurement infrastructure to address future challenges
- Growing collaborative national skills initiatives



The Government Chemist function

The role, of the Government Chemist as first legally defined in 1875, had the twin aims of supporting consumer protection and providing businesses with a route of scientific appeal in the official control system. The role continues to this day, fulfilling statutory and advisory functions under the Government Chemist Programme, funded by the Department for Business, Energy and Industrial Strategy (BEIS).

These overarching twin aims are achieved by providing independent science-based opinion and advice through the:

- Statutory function as Referee Analyst**
 The Government Chemist is the named referee analyst under several Acts of Parliament (see Appendix 1) and regulations made under those Acts. This independent and impartial referee analysis, allows resolution of technical disputes, predominantly, in the food and agriculture sectors between an Official Control Laboratory (usually a local authority public analyst) and a laboratory acting for a manufacturer/trader, that occur in relation to legislation focussing on public protection, value for money and consumer choice.

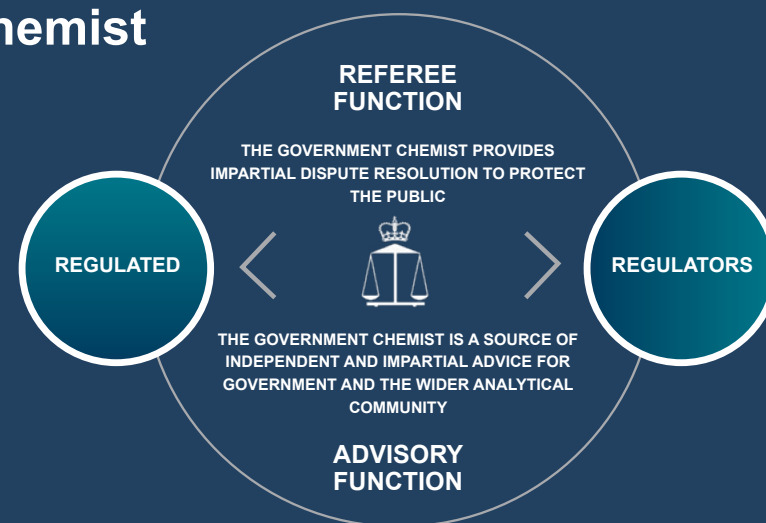
- Advisory function**

A source of independent and impartial advice for both Government and the wider analytical community on the chemical and biological analytical measurement science implications on matters of policy, standards and regulations across the public sector.

BEIS is advised on the efficiency and governance of the programme by an independent Programme Expert Group (PEG) made up of industry, enforcement, academic and other stakeholders.

A small specialist team, "The Office of the Government Chemist (OGC)" delivers the programme, with the resources of the wider National Measurement Laboratory (NML) at their disposal when required.

Government Chemist



WE RESPOND TO OVER
50 ENQUIRIES
 FOR ADVICE EVERY YEAR

WE COMPLETE
10-15 REFEREE CASES
 EVERY YEAR WITH ASSOCIATED
COURT SAVINGS
 OF APPROXIMATELY £1.5 – 2.25M

WE ENGAGE WITH OVER
200 STAKEHOLDERS
 ON A REGULAR BASIS



Impact

The impact of the Government Chemist role lies in preventing unwitting errors in measurement science that would have adverse impacts on consumers, businesses and the criminal justice system.

Resolving scientific disputes between UK Regulatory Authorities and Food Businesses prior to costly court hearings has clear benefits both to businesses and the criminal justice system. Even marginal alleviation of the number of cases going to trial has benefits for an already stretched court system. Court cost savings have been calculated to be approximately £150K per case. The Government Chemist receives an average of 10 cases per year, rising to 15 in 2019, which equates to a saving in the region of £2.25M p.a.

In addition, there are indirect benefits to food businesses through quick resolution of these cases. These include savings on the cost of impoundment of food consignments at ports and by local authorities, reduced lost revenue resulting from the shorter period of impoundment and any costs associated with spoilage during impoundment, and lost revenue and reputation arising from any required food recall with potential associated high profile food safety court cases.

The scientific advice, delivered by the Government Chemist Programme, enables the analytical community to tackle complex measurement problems and helps protect consumer's health and choice as well as fostering innovation. The Government Chemist typically responds to an average of 50-60 requests for advice per year, on a wide range of topics and from a wide selection of

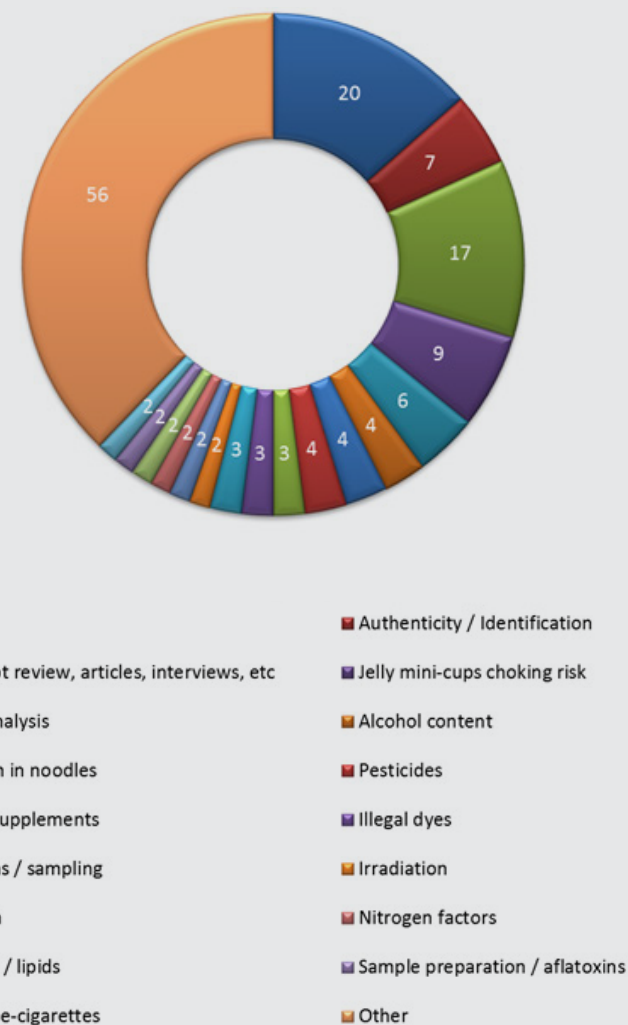
stakeholders (Figure 1). Food and feed regulation in the UK is complex due to its broad scope and the need for alignment with importing and exporting countries.

The Government Chemist completes quarterly regulatory updates by undertaking horizon-scanning activities (predominantly UK and EU-based, on basis of current country of origin of food imports, though this may change post EU-exit), which are published on its website¹. These updates are accessed by over 100 regular users and are considered very useful to stakeholders in the testing and law enforcement communities.

The Government Chemist, via its team of experts, provides expert input into a number of committees, (e.g. FSA Committee on Toxicity (COT), the Hazardous Substances Advisory Committee (HSAC), the Nanomaterials Environment, Health Industry Group (NEHIG), MHRA and Standards Liaison Group for Advanced Therapies (SLGAT)) to influence the development of new legislation, standards and policy. This is to ensure that these are based on sound measurement science and fit for purpose.

UK Government (including the Devolved Administrations) carries out consultations to obtain input of both interested and expert stakeholders in particular matter of policy, guidance or legislation prior to enactment. The Government Chemist provides timely input into these consultations, drawing from the team's expertise, and that extended expertise available through the National Measurement Laboratory.

Figure 1 **Type of enquiries received by the Government Chemist during a three-year programme**



¹ www.gov.uk/governmentchemist

Strategic Aims 2020-2023

Informed by the continuous horizon scanning activities that the Government Chemist team undertakes, the current regulatory framework², the FSA Review of Official Food and Feed Laboratories (see our perspective in Box 2) and the Government Chemist stakeholder consultation exercise conducted in May 2019³, a set of strategic objectives has been drawn up for the Government Chemist Programme from 2020 to 2023.

Protecting
consumers in
a changing world



Supporting business
and government
across the UK



Maximising UK
measurement
infrastructure to
address future
challenges



Growing
collaborative
national skills
initiatives



² FSA Changing food regulation: what we've done, where we go next (From the Regulating our Future document collection): <https://www.food.gov.uk/sites/default/files/media/document/changing-food-regulation-what-weve-done-where-we-go-next.pdf>

³ <https://www.gov.uk/government/publications/government-chemist-stakeholder-workshop-report-2019>

Box 1 The food we eat

Food and animal feed must be safe, authentic and properly labelled, the responsibility for which falls to those who make and sell it⁴. There is, however, a public expectation that government will enforce mechanisms to ensure food safety and authenticity and therefore, domestic legislation exists to provide this regulatory oversight. In the UK, the defining “Sale of Food and Drugs Act” of 1875, introduced much of modern food regulation including the Government Chemist role. The current equivalent measure, the Food Safety Act 1990, provides the enabling powers under which all food regulations are made, including those on food labelling.

The UK currently imports about half its food, with almost half of that food originating from third countries and being inspected at ‘Border Inspection Points’ (BIP) (mainly sea ports, but also airports, and where there are overland routes at the physical border or a designated holding area), on a targeted basis. Perceived threats to the food chain are reported via RASFF (Rapid Alert System for Food and Feed) alerts⁵.

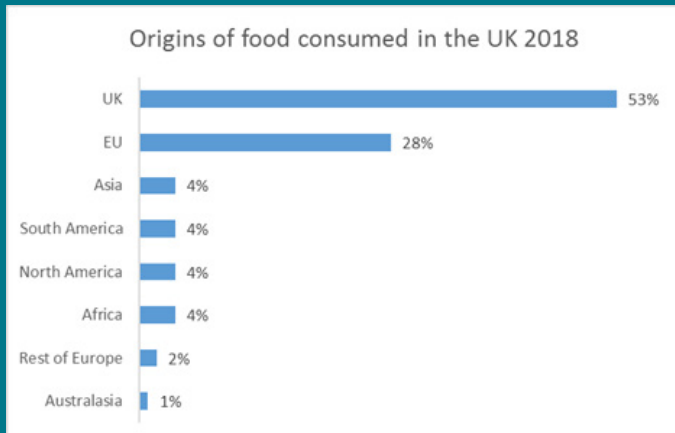


Figure 2: Origin of food consumed in the UK in 2018. National Statistics: Food Statistics in your pocket

So-called ‘inland authorities’ (Local Authorities) also take food samples, mainly concentrating on food produced in the local area they have responsibility for, but also occasionally on a commodity or ‘problem’ basis, e.g. foods that may pose an allergen risk. In these latter cases, they will be ‘targeting’ foods that have slipped through BIP inspection⁶.



⁴ Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1),

⁵ <https://www.bbc.co.uk/news/business-49258852>

⁶ Food allergy, a summary of eight cases in the UK criminal and civil courts: effective last resort for vulnerable consumers?: Food allergy cases in UK criminal and civil courts. Gowland MH, Walker MJ. J Sci Food Agric. 2015 Aug 15;95(10):1979-90. doi: 10.1002/jsfa.6988



Protecting consumers in a changing world

With an ever-expanding variety and number of sources of food consumed in the UK and a potentially changing regulatory environment, the Government Chemist will continue to support the work of the law-enforcement and regulatory bodies to ensure consumers rights are protected.

In the event of EU-Exit the UK government has committed itself to transposing all EU food law extant, on the day we leave, into UK law with the aim of preserving the decades of careful work building up a coherent body of law that protects consumers and permits trade free from differing regulatory barriers. However, post EU-Exit, there is the potential for divergence in risk assessment and its subsequent management by legislation, inability to influence developing EU law, restricted access to RASFF, barriers to sharing intelligence and disputed mandate for up to date changes in import surveillance⁷. The Government Chemist will keep aware of these possible developments and respond accordingly through this strategy.

The work of the referee function ensures that, where official findings are confirmed, legislation protecting consumers from unacceptable levels of

risk is upheld and protects their right to make safe choices⁸ by:

- Keeping under review developments in securing national and international regulatory compliance and continuing to lead and influence the development of international standards for an optimal input of the Government Chemist expertise into policy and regulatory decision-making.
- Expanding the resource provision for the advisory function to be able to support the increasing numbers and breadth of requests⁹.
- Providing definitive resolution of ever-increasingly more complex referee cases in a timely manner, in line with the Government Chemist referee sample submissions policy, through the deployment of scientific and technical expertise and world-class measurement science.

A changing pattern of food consumption and country of origin resulting from any EU-Exit could, reasonably, be expected to place additional pressure upon the UK official control system and therefore increase the likelihood of additional need for the Government Chemist referee function.

⁷ Commission Regulation (EC) No 669/2009

⁸ Food Standards Agency Strategic Plan 2015-20, "Food we can trust"

⁹ [2018 Government Chemist Annual Review](#): the number of requests for advice increased to 76 from a baseline of 50 in previous years



Box 2 FSA Review of Official Food and Feed Laboratories

This review, carried out by the FSA in 2018/19 evaluated the capacity, capability and governance of the UK official food and feed laboratory system, especially taking into account the potential impact of EU Exit. It sets out a vision for how a future UK official food and feed laboratory system could look and highlights some of the next key steps required to develop an improved system.

The review noted the UK has sufficient laboratory capacity for Day 1 of EU Exit but it acknowledged that “it is highly fragmented, with complex funding structures”. Such deficits have led to a “lack of central accountability, limited data and intelligence sharing”, and overall “there is a gap in the funding and resources required to sustain effective food and feed sampling and testing”. The review also noted that “laboratory testing is a front-line service that is critical to national sampling and surveillance programmes”.

There are potential areas for improvement, including better strategic leadership, coordination and integration. A new UK official food and feed

laboratory system should align with sampling strategy, the delivery of food standards official controls, and strategic surveillance capability in a cross-governmental manner¹⁰.

Equally, a world class regulatory regime protects consumers and responsible traders and demonstrates that the UK is a good place to do business.

The Government Chemist welcomes FSA’s and Defra’s far-reaching plans in all these areas and stands ready to offer impartial guidance and help. In a period of inevitable flux, attendant on modernisation and change, the need is never greater for independent scientific advice and appeal and the Government Chemist must ensure that our own capabilities and capacity are appropriate to meet the demanding times ahead.

¹⁰ <https://www.food.gov.uk/sites/default/files/media/document/fsa-19-09-06-lab-review.pdf>



Supporting businesses and Government across the UK

The Government Chemist's vision is to provide world class measurement science to support an innovative and growing UK agrifood sector that trades sustainably on a global basis. This is achieved through the provision of impartial and unbiased technical advice and scientific measurement functions not just as a route of technical appeal for the UK Government and industry but also as a valued expert resource. We will increase the value of this function, nationally and internationally by:

- Growing the stakeholder base by greater engagement with industrial trade organisations and networks to increase awareness of the Government Chemist role and the benefits of independent and impartial dispute resolution and advice.
- Continuing to forge meaningful dialogue with all stakeholders in areas that link measurement and regulation to minimise probabilities for disputes.
- Leading, or having presence on, key government and other relevant groups or committees, emphasising the role of the Government Chemist in providing sound measurement advice
- Utilising the unique position of the Government Chemist to positively influence measurement science related issues internationally, for the benefit of the UK stakeholders.
- Undertaking more formal impact assessment of all Government Chemist interventions to understand the ongoing benefits to both government and businesses.
- Continuing to expand the Food Authenticity Network (www.foodauthenticity.global), internationally, now a public-private partnership supported by UK Government through the Government Chemist programme.

Maximising UK measurement infrastructure to address future challenges

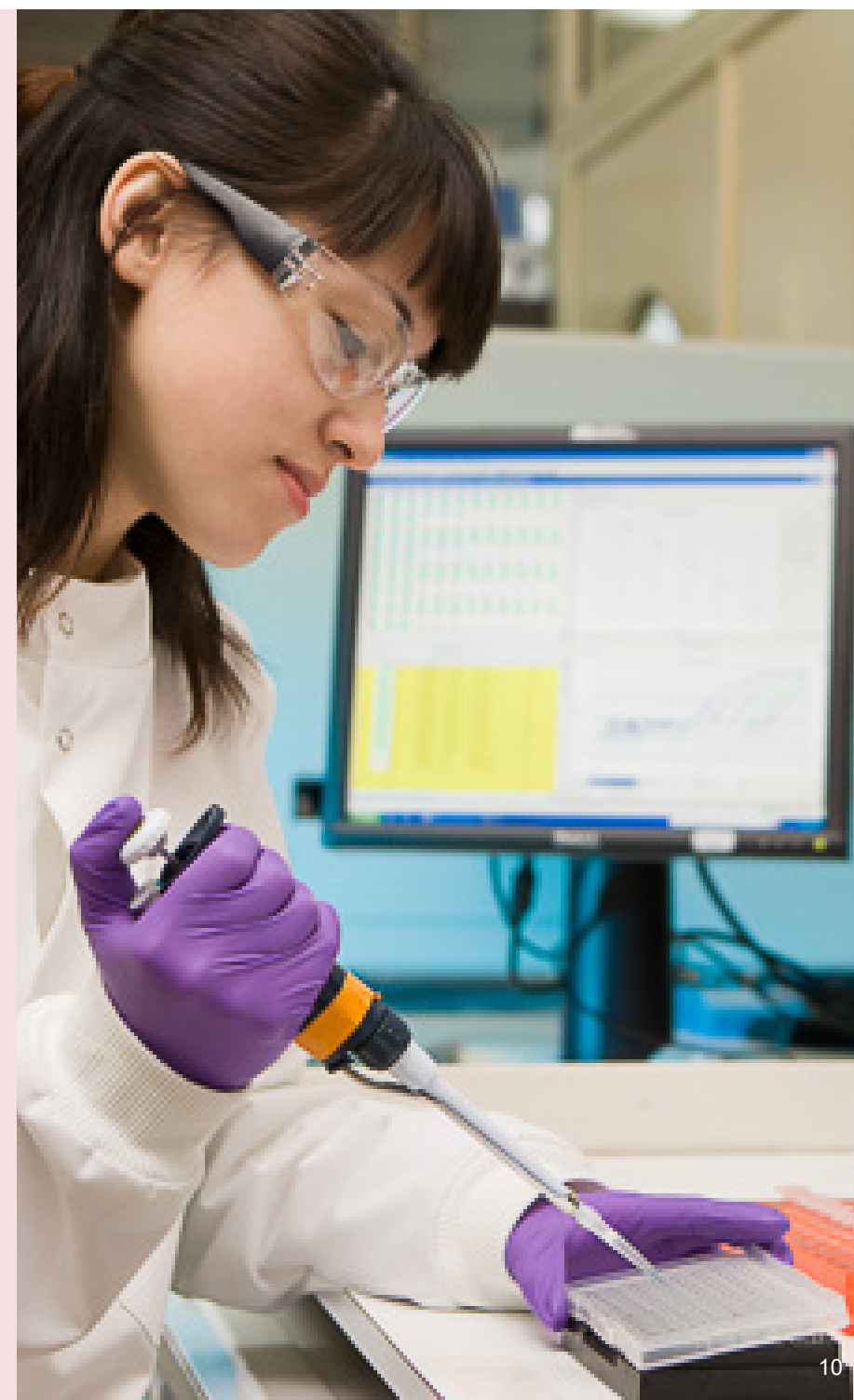
The Government Chemist Programme will maintain its position as an impartial operator in the food and feed sector, and grow links within the supporting scientific community. This in turn will provide an opportunity to enhance and future proof existing capabilities and maximise collaborative synergies between stakeholders. We will deliver this by:

- Investing in new technologies to ensure scientific capabilities are built in to future-proof expert technical provision, able to reflect and deliver priorities identified by Government Chemist horizon scanning and stakeholder consultation (see Box 3) activities.
- Continuing professional development of staff who form the core skill-base to deliver the Government Chemist programme efficiently and to the required high standard.
- Increasing emphasis on dispute avoidance by working with partner organisations such as Food Standards Agency (FSA), Defra, Food Standards Scotland (FSS), Department of Health and Social Care (DHSC) and their Official Control Laboratories, port authorities, trading standards and environmental health officers.
- Ensuring key regulatory and analytical developments, and knowledge gained during referee analysis, continue to be transferred effectively to all relevant parties.

- Growing the advisory role to address the increased demand, in a strategic and holistic manner, to capitalise the wealth of chemical and bio-analytical measurement science expertise available to the Government Chemist, through being co-located at the National Measurement Laboratory.
- Expanding the provision of advice and support, ensure greater visibility of the Government Chemist role to central government and to the Devolved Administrations to maximise impact and value for money across government.

Box 3 Summary of technical challenges raised at stakeholder consultation

- the impact of alternative packaging materials,
- the use of point of use analysis technologies,
- persistent issues with allergen testing,
- increase in food fraud in a global market, and
- lack of trust in emerging technologies as well as the databases they use.



Growing collaborative national skills initiatives

The GC programme will maximise the impact of the capability developed through efficient and timely dissemination and strengthening and grow collaborative training and skills initiatives, as highlighted as a major need during the stakeholder consultation.

The value of the referee function and advisory role will be extended beyond first-line stakeholders through greater knowledge transfer and dissemination activities central to the function of the Government Chemist by:

- Extending the 'Joint Knowledge Transfer Framework for Food Standards and Food Safety', beyond its initial three-year (FY17-20) programme. This initiative is a joint government (BEIS, Defra, FSS & FSA) funded Knowledge Transfer project established by the Government Chemist, in which funds are pooled annually to deliver greater impact by transferring practical knowledge from government funded projects to all relevant stakeholders.
- Continuing to support the sustainability of the statutory qualification required for practising as a Public Analyst in the UK by training MChemA candidates via the annual residential training course.
- Continuing to provide training events for the scientific community to enhance skills in the food and feed testing sector and minimise the probabilities for disputes.
- Disseminating the work of the Government Chemist via scientific peer reviewed publications and articles, presentations at relevant scientific conferences and networking events, as well as developing an ever more effective digital media strategy.

Conclusion

This strategy sets out an expanded vision for the Government Chemist Programme that is fit for the changing world we are facing and one which will meet the long-standing aim of the Government Chemist to **support consumer protection and providing businesses with a route of scientific appeal**. It outlines plans to better maximise cross-government assets across the UK infrastructure and to enhance leading capability more globally, in line with stakeholder, technological and regulatory needs and skills initiatives.

APPENDIX 1
Legislation
under which the
Government
Chemist duties
operate



The duties of the Government Chemist as referee analyst are defined in or under:

Food Safety Act 1990

Food Safety (Sampling and Qualifications) Regulations 2013

Food Safety (Sampling and Qualifications) (Scotland) Regulations 2013

Food (Northern Ireland) Order 1989

Food Safety (Northern Ireland) Order 1991

Food Safety (Sampling and Qualifications) Regulations (Northern Ireland) 2013

Food Safety (Sampling and Qualifications) Regulations (Wales) 2013

Rheoliadau Diogelwch Bwyd (Samplu a Chymwysterau) (Cymru) 2013

Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007

The Natural Mineral Water, Spring Water and Bottled Drinking Water (Scotland) (No. 2) Regulations 2007

The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations (Northern Ireland) 2015

The Natural Mineral Water, Spring Water and Bottled Drinking Water (Wales) Regulations 2015

Rheoliadau Dŵr Mwynol Naturiol, Dŵr Ffynnon a Dŵr Yfed wedi'i Botelu (Cymru) 2015

Materials and Articles in Contact with Food (England) Regulations 2012

Materials and Articles in Contact with Food (Scotland) Regulations 2012

Materials and Articles in Contact with Food (Wales) Regulations 2012

Rheoliadau Deunyddiau ac Eitemau mewn Cysylltiad â Bwyd (Cymru) 2012

Materials and Articles in Contact with Food (Northern Ireland) Regulations 2012

Agriculture Act 1970

The Animal Feed (Hygiene) and Enforcement Regulations 2015¹¹

Genetically Modified Animal Feed Regulations 2004

Human Medicines Regulations 2012

Farm and Garden Chemicals Act 1967

The Government Chemist is named and has other scientific responsibilities under:

Merchant Shipping Act 1995

Hydrocarbon Oil Duties Act 1979

Poisons Act 1972

Status & territorial extent of the Government Chemist are understood with reference to:

Freedom of Information Act 2000

Scotland Act 1998 (Cross-Border Public Authorities) (Specification) Order 1999

Administrative Provisions Act (Northern Ireland) 1928

¹¹ Enacted as separate legislation in England, Northern Ireland, Scotland and Wales



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