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Guidance Note for Control Bodies on the EU organic testing procedure within the UK

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Principles applicable to the testing procedure

The fundamental premise of the EU organic regime is that there is mutuality and equivalence of Control Bodies, EU standards and EU systems. This is enshrined in **Article 34(1) of Regulation 834/2007**, which requires Control Bodies in one Member State to recognise the EU organic status of a product certified in another Member State. It follows that the requirements of **Article 34(1)** apply equally between Control Bodies within a Member State and, therefore, the EU organic status of a product certified by one Control Body must be respected and recognised by another Control Body.

In further support of this, Article 28(4) of Council Regulation (EC) 834/2007 provides that if an operator complies with the EU Organic Regulations and pays a reasonable fee towards control expenses is entitled to be covered by the organic control system. An operator who has been certified by one Control Body should have access to certification across the EU organic regime. Therefore, Control Bodies that fail to recognise the EU organic status of a product already certified by another Control Body (either in the UK or in another Member State) may be in breach of Article 28(4).

In accordance with this, a Control Body should not implement any control measures (including testing) on any product that has been previously certified as organic by another Control Body where its physical characteristics are unchanged, unless the Control Body has a suspicion that the product may contain a prohibited substance. There are no restrictions on testing products that have not been previously certified as organic by another Control Body, nor on a product that has been physically changed, nor where a Control Body is testing one of its own operators for compliance against its own additional standards. Further details are included in Section A.

A Control Body is a body which Defra has delegated its control tasks to under the EU organic regime. Some bodies offer a scheme with private standards which are additional to those required by the EU organic regime. Matters relevant to the confirmation that those private standards have been met (such as the use of a logo) are a commercial matter between the body and its customer(s). Defra is concerned only if those arrangements undermine the EU organic control regime.

A. Testing

Testing by a Control Body of its own operator

1. Control Bodies may take samples of their operators' products[1] for:

- testing for products not authorised for EU organic production;
- checking production techniques are in conformity with the EU organic production rules; and
- detecting possible contamination by substances that are not authorised for EU organic production.

2. Testing **must** be carried out where the use of substances not authorised for EU organic production ('prohibited substances') is suspected[2]. Some examples of how a Control Body may gain a suspicion are:

- reliable information[3] received from an operator, a member of the public, another organic Control Body, retailers or others in the supply chain;
- an alert from Defra, the Competent Authority, that a prohibited substance may be present in a batch of imported organic product;
- notification from another UK, Member State or EU authority that either an organic product contains prohibited substances or there is a risk that it contains prohibited substances;
- visual inspection of the product which indicates that contamination may have occurred e.g. damaged packaging, inaccurate labelling;
- visual inspection of the premises and equipment which indicates a significant risk that contamination may have occurred e.g. inadequate separation measures or clean-down practices;
- review of the documentation accompanying a product;

[1] Article 65(2) of Commission Regulation (EC) 889/2008 laying down detailed rules for the implementation of Council Regulation 834/2007 ('Regulation 889/2008')

[2] Article 65(2) of Regulation 889/2008

[3] "reliable information" is any information that is from a trustworthy source. Where the level of detail from an anonymous source suggests that the source can be considered to be reliable, the Control Body may wish to investigate further.

- Where a composite product has been tested to show positive residues of prohibited products.

Different types of testing which are permissible

3. Control Bodies may carry out:

- **Routine Testing** - as part of a routine inspection of the Control Bodies' member operators (at least once a year) as required by the EU Organic Regulations to ensure the product complies with the Regulations[4];

- **Targeted Testing** - of particular products that the Control Body considers, with good reason, carry a heightened risk of containing a prohibited substance (e.g. where a Control Body has been alerted to cases of a particular product being contaminated by a prohibited substance);

- **Random Testing** - as part of random control visits required by the EU Organic Regulations, based on evaluation of the risk of non-compliance with the organic production rules, and taking into account, at least, the results of previous controls, the quantity of products concerned and the risk for exchange of products[5]

For the purposes of livestock operators, "testing" also includes the further inspection of stock, records and facilities.

4. Bodies may offer private (i.e. non-EU organic and so non-Control Body) standards. According to the terms of these schemes, Control Bodies will conduct testing to ensure the product meets the Body's own private standards. These tests are outwith the EU Organic Regulations and may occur according to the terms of the scheme established by the Body that an operator chooses to join.

5. Where the testing referred to in paragraph 4 shows that the product does not meet the Control Body's own private standards but would still comply with the EU standards, the product must still be labelled as organic in accordance with the EU organic requirements if the operator still wishes it to be sold as organic.

Testing by a Control Body of a product previously certified as organic by a different Control Body

6. In accordance with the principle of mutuality and equivalence enshrined in Article 34(1) of Council Regulation 834/2007, where a product has been previously certified as

[4] Article 65(1) and (2) of Regulation 889/2008

[5] In accordance with Article 65(4) of Regulation 889/2008

EU organic by another Control Body, the integrity of that certification must be respected[6]. For example, where a product has been certified as EU organic by Control Body 'A' and its physical characteristics are unchanged (such as where an operator obtains a certified product in bulk and places it in smaller packaging for retailing), Control Body 'B' should not test the product unless Control Body 'B' has a suspicion – as identified under paragraph 2 of this Guidance Note - that the product may contain a prohibited substance. However, this does not preclude a body's additional private standards being tested for.

7. Where a certified product is used as an ingredient in a composite product that has not yet been certified as EU organic, a Control Body may test the composite product as its physical characteristics have changed. This could result in a substantiated suspicion that a prohibited substance has been used in the composite production of the organic product (see Section D below for procedure on substantiated suspicion). Ingredients that are yet to be used in the composite product should not be tested if they have already been certified to be EU organic i.e. existing certification must be respected.

8. Where a previously certified single ingredient product undergoes further processing (e.g. the rolling of organic oats), a Control Body may test the processed product as its physical characteristics have changed. This could result in a substantiated suspicion that a prohibited substance has been used in the processed product (see Section D below for procedure on substantiated suspicion). Ingredients that are yet to be further processed should not be tested if they are already certified i.e. existing certification must be respected.

B. Taking samples and livestock testing

Sampling of products

9. In accordance with the obligations arising under Articles 11(5)-(7) of Regulation 882/2004[7] Control Bodies should take a minimum of three samples of a product for the purposes of testing: one sample for testing, the second to be kept by the operator, and the third to be kept by the Control Body. Should the results be queried by an operator, the Control Body must undertake further analysis of the product, including the analysis of another available sample. This could be any of the other samples collected. The costs of

[6] Article 65(2) of Regulation 889/2008 should be read in conjunction with the principles enshrined in Article 34(1) of Regulation 834/2007, which means that testing cannot take be undertaken on products that have been previously certified as organic by another Control Body.

[7] Regulation (EC) No. 882/2004 of the European parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules ('Regulation 882/2004'). Article 27(1) of Council Regulation 834/2007 requires the organic control system in a Member State to comply with the requirements of Regulation 882/2004.

any further analysis may be recovered from the operator where further analysis of the product produces either the same or similar results. The operator may also arrange for further analysis of the product himself if he chooses but the sampling and analysis would need to comply with the requirements set down in Regulation 882/2004.

Taking samples

10. The following principles should be adhered to when taking samples:

- The procedure must avoid contamination or risk of contamination of the sample – i.e. inspectors should avoid handling/ touching the samples, use only clean new bags or containers, store in clean and dry conditions and send the sample to its destination as soon as possible;
- Inspectors should be aware prior to taking the sample of any special storage requirements and act accordingly;
- Samples taken must be representative of the batch as a whole;
- Samples taken should be taken, bagged and sealed in the presence of the operator;
- As much information as possible should be included on the label of the sample (see below).

Sampling methods

11. Samples should be taken from clearly defined 'lots'[8] . The position at which each sample is taken should preferably be chosen randomly but, where this is physically impractical, it should be chosen randomly from the accessible parts of the lot. The samples taken (known as 'primary samples') should then be combined and well mixed to form a 'bulk sample'. The 'bulk sample' should then be divided into three to form the three samples for the purposes of testing referred to in paragraph 9. The 'primary samples' must therefore contribute sufficient material to enable all three samples to be withdrawn from

[8] A 'lot' is an identifiable quantity of goods that have common properties or uniform characteristics such as origin, producer, variety, packer, type of packing, markings, consignor.

- In the field a lot would comprise a crop of single variety in a clearly defined area which has been treated as a single crop;
- In all post-harvest situations, whether in bulk or packaged goods, the lot should reflect the field lot, or as near as possible where practical;
- In processing operations the lot may be 'batched' delivery of raw materials or a clearly defined production run of goods awaiting dispatch.

the bulk sample. For meat and poultry, the 'primary sample' is considered to be the equivalent of the 'bulk sample'. Further details on taking samples of specific products are set out at Annex B.

Handling the samples and recording data

12. In all cases the sample should then be taken, bagged and sealed in the presence of the operator and signed, sealed and dated by both parties. One sub-sample, for each lot sampled, should be left with the licensee and the rest should be taken to the Control Body's premises. Samples may be sent to the laboratory directly in urgent cases. Where any samples are not sent to the Control Body's premises or the laboratory immediately, they should be placed in a refrigerator in order to slow down the degradation of chemicals. Any samples frozen prior to dispatch should be sealed in a polythene bag or bottle to prevent any further contamination and should be kept frozen.

13. The Control Body must properly label each sample for testing. Samples for testing from the same lot or field must have the same reference code. If more samples are taken from different lots or fields, these must have a different reference code. As a minimum, the following traceability information must be recorded for the samples taken:

- Batch number assigned by the operator and, if applicable, the suppliers' product reference for the raw materials;
- Details of the container e.g. sealed or open;
- Details of the supplier (name and contact details i.e. address, telephone number and e-mail address);
- Copies of the delivery documents and goods in log (i.e. the documents accompanying the product when it was delivered to the operator);
- The date of when the product was delivered to the operator
- Details of where the sample is taken from (e.g. off a production line or the floor of a grain bin);
- The date that the sample was taken;
- The name of the person taking the sample;

The Control Body is responsible for sending the samples to the laboratory for testing. The laboratory chosen must comply with paragraphs 15 to 17 below.

Livestock testing

14. Where there is a suspicion that livestock have been given feed containing prohibited substances or have been given doses of chemically-synthesised allopathic veterinary medicinal products or antibiotics that exceed the amounts stated in Article 24 of Commission Regulation 889/2008[9], Control Bodies should undertake an inspection of the livestock, records and facilities, which involves:

- Checking the relevant feed records for the animal, including feed delivery information, invoices and the animal's feed rations;
- Where possible, carrying out a mass balance exercise for the animal's feed;
- Inspecting veterinary records if there is a suspicion regarding the animal's compliance with the veterinary requirements of Regulation 889/2008.
- Inspecting movement records, crop treatments and silage treatments

Isotope testing and analysis of livestock products might also be used to substantiate or remove suspicion where possible.

C. Laboratories

15. In accordance with Article 12 of Regulation 882/2004, the laboratories used for the analysis of products selected for testing should be assessed and accredited in accordance with the following European Standards:

- EN ISO/ IEC 17025 on "General requirements for the competence of testing and calibration laboratories";
- EN ISO/ IEC 17011 on 'General requirements for accreditation bodies accrediting conformity assessment bodies".

16. Only those laboratories that comply with the requirements of Regulation 882/2004 may be used for analysis of testing. This includes the requirement for the laboratory to be accredited by the relevant accreditation body in the Member State.

17. The United Kingdom Accreditation Service (UKAS) is the accreditation body for the UK. Accredited laboratories are accredited to undertake specific tests and Control Bodies must ensure that the laboratory chosen to undertake a particular test is accredited for that

[9] Article 24 of Commission Regulation (EC) 889/2008 states that where an animal receives more than three courses of treatments with chemically synthesised allopathic veterinary medicinal products or antibiotics within 12 months (or more than one course of treatment if their productive lifestyle is less than one year), the animal's products cannot be sold as organic and the animal would need to be reconverted to organic status.

test. Control Bodies may also use laboratories in other Member States which have been accredited by the relevant accreditation body in that Member State for analysis of samples.

D. Substantiated suspicion

18. Once the Control Body obtains the test results from the laboratory, it will need to consider whether any levels of prohibited substance in the organic product are consistent with the EU Organic Regulations or require further investigation.

19. If the prohibited substance in an organic product exceeds the Maximum Residue Level[10] ('MRL'), the Control Body should conduct further investigations and inform the Chemical Regulation Directorate ('CRD') of the finding in case they wish to take any action. The CRD's website[11] includes information on MRLs and sanctions or further actions that the CRD might undertake if the MRL is exceeded. The Control Body should also notify the CRD when any substances not registered for use in the UK or not authorised for use on the affected product is identified, especially when the substance is of a non-residual nature.

Obligations of Control Bodies under Article 91(1) of Commission Regulation (EC) 889/2008

20. In accordance with Article 91(1) of Regulation 889/2008, an operator might have alerted the Control Body of a suspicion that a product is not in compliance with organic production rules and have blocked the product from being sold as organic until the suspicion is eliminated. In these cases:

- the onus will be on the operator to investigate the matter further;
- the operator must keep its Control Body informed of progress with investigations;
- the operator must answer any questions/ follow any instructions from its Control Body on the matter;
- where the operator uses laboratory testing, the testing must be done to a standard that is acceptable to the Control Body e.g. an accredited laboratory and/ or an accredited test. If the testing is not done to the satisfaction of the Control Body, the

[10] Maximum Residue Level (MRL) – A definition of an MRL is set out in Article 3(d) of Regulation (EC) No 396/2005 of the European Parliament and of the Council: "Maximum Residue Level (*MRL) means the upper legal level of a concentration for a pesticide residue in or on a food or feed set out in accordance with this Regulation, based on good agricultural practice and the lowest consumer exposure necessary to protect vulnerable consumers."*

[11] http://www.pesticides.gov.uk/guidance/industries/pesticides

findings may not be accepted as evidence that any doubt of the product's integrity has been eliminated;

- the operator must provide its Control Body with satisfactory evidence that the doubt has been eliminated before selling the product as organic;

- the operator must inform its Control Body if it is unable to provide satisfactory evidence that the doubt has been eliminated.

21. When an organic Control Body is alerted of a suspicion that a product is not in compliance with organic production rules by an operator (acting in accordance with Article 91(1)), it can:

- require that the product is not sold until it receives satisfactory information from either the operator or another source that the suspicion has been eliminated;

The Control Body should then:

- check any information provided by the operator or another source and confirm whether or not the suspicion has been eliminated;

- allow the product to be sold as organic if the suspicion has been eliminated;

- if the operator is unable to provide satisfactory evidence that the suspicion has been eliminated, the Control Body should, if necessary, implement the procedures outlined in Section E of this Guidance.

Although the onus is on the operator to provide evidence on the organic integrity of the product, the Control Body may assist the operator with investigations if it wishes to.

Products certified by the Control Body that carried out the testing

22. Where the results of permissible testing reveal that a product contains a level of a prohibited substance that is not consistent with organic production, a Control Body may have a substantiated suspicion that it does not comply with the EU Organic Regulations. If this is the case, in accordance with Article 91(2) of Regulation 889/2008, the Control Body can require that the operator may not market the product as EU organic for a defined period set by the Control Body. However, before doing so, the Control Body must allow the operator to comment on the matter. There is an obligation to withdraw any reference to the organic production method if the Control Body is sure that the product does not fulfil the requirements of organic production (See Section E).

23. The Control Body should:

- inform the operator of the results of the permissible testing and explain that it has a substantiated suspicion that the level of prohibited substance found is not consistent with organic production;

- give time for the operator [48 hours] to query the results if he wishes;

- if the operator does not query the results or the resolution of the query does not remove the suspicion, the Control Body may forbid the operator from marketing the product as EU organic for a defined period;

- ensure that the operator is fully aware of this period and require him to co-operate with investigations as fully as possible.

24. The onus will be on the Control Body to investigate the cause of the presence of the prohibited substance in the product in order to determine whether the product is in compliance with the EU organic production rules. However, the Control Body and the operator may decide to follow the procedure set out in paragraphs 20 and 21 above in accordance with Article 91(1) of Regulation 889/2008. The procedure for investigations will depend on the type of ingredient or product affected; the prohibited substance involved; the level of contamination and where the product sits in the supply chain. The Control Body will need to exercise its own judgement on the procedure used but such investigative actions can include:

- Checking whether the level of prohibited substance is consistent with actual use of the product. Any review prior to full investigation would need to consider the nature of the substance found to determine the likelihood of that substance indicating that the product might not have been produced to organic methods;

- Doing spot checks on operators further up the supply chain to ascertain whether their procedures are consistent with organic production;

- Checking whether any other products might have been affected by the prohibited substance;

- Asking the operator to give a possible explanation for the levels of prohibited substance.

25. The Control Body's investigative process should determine as fully as possible whether the presence of a prohibited substance in the product results from the unavoidable contamination of the organic product. For example, the product could be produced by methods that are consistent with organic production but unavoidable contamination occurred through circumstances outside of the operator's control. These might include:

- Contamination through spray drift (despite critical control points[12] being identified and appropriate measures to prevent contamination being in place and approved by the Control Body);

- Legacy chemicals e.g. chemicals present in the soil from prior to organic conversion;

- Flooding of the field or production/ processing premises;

- Contamination by highly persistent and volatile chemicals (e.g. chloropropham can permeate plastic and potentially contaminate packaged organic potatoes once on the retail shelves).

26. In tandem with the levels of prohibited substance involved, the process should consider the seriousness of the incident. For example, if the contamination (even if unavoidable) resulted from an operator's negligence or such incidents happened regularly due to a lack of care or precaution on the part of the operator, this might have a bearing on the Control Body's decision.

27. An investigation might establish that a product was contaminated by methods that are inconsistent with organic production. These might include:

- the deliberate misuse of a particular substance or an intentional breach of the Regulations;

- insufficient analysis and identification of critical control points for contamination/ substitution or co-mingling;

- not following the operator's (or Control Body's) procedures and preventative methods – including cleaning and separation procedures as set out in Article 63(1)(c) of Commission Regulation (EC) 889/2008;

- lack of clear segregation between organic and conventional batches.

28. If, following investigation, the Control Body concludes that the presence of the prohibited substance results from practices that are consistent with organic production, the product may be marketed as organic. However, if the Control Body concludes that the presence of the prohibited substance results from avoidable contamination or practices that are inconsistent with organic production, the procedure outlined in Section E of this Guidance Note will apply.

[12] A critical control point is a point in the production process when there is a risk of the product being contaminated by a prohibited substance.

Products certified as organic by another Control Body

29. Where products that have already been certified as organic by another Control Body are found not to be in compliance with the organic production rules, or there is a substantiated suspicion that this is the case, the second Control Body (i.e. the Control Body that now holds the product and has undertaken the testing) **must** inform the first Control Body (i.e. the Control Body that originally certified the product further up the supply chain) of the findings. Where the first Control Body requests information from the second Control Body in order to investigate the matter further, the second Control Body must provide relevant information on the results of its controls. Defra, as the Competent Authority for the organic control system in the UK, requires the second Control Body to supply the first Control Body with the following traceability data as a minimum:

- names and contacts of suppliers;
- the relevant Control Bodies' certificates;
- any import documents;
- batch and container numbers;
- invoices;
- delivery notes; and
- copies of analytical reports.

The second Control Body must also inform Defra about the matter and provide details of the first Control Body.

30. Upon being informed of the matter by the second Control Body, the first Control Body must investigate the substantiated suspicion further. This will involve carrying out the actions described in paragraphs 22 to 28 of this Guidance Note. Defra must be kept informed of progress with the investigations at regular intervals and any difficulties.

31. Within two working days of the substantiated suspicion being notified to the second Control Body, the second Control Body must inform the first Control Body of the findings of its investigation and provide the traceability data following a request for further information. The first Control Body should provide the second Control Body with a report of its investigations and findings within 30 days of being informed of the matter. If the first Control Body is unable to meet this deadline it should inform the second Control Body and provide a timescale by which it will have completed its investigations.

E Action to be taken where an irregularity or infringement is found

32. Following an investigation of the presence of a prohibited substance in an organic product, the Control Body may conclude that the product has been produced in a way that is inconsistent with organic production methods.

33. In accordance with Articles 30(1) and 30(2) of Council Regulation 834/2007, any product that contains a prohibited substance which was found to result from actions that are inconsistent with organic practices should have its organic status removed. Where the presence of the prohibited substance is at a low level and resulted from unavoidable contamination, the Control Body may decide not to remove the organic status of the product. It should ensure that its reasons for doing so can be justified from the results of the investigation.

34. Where the infringement is more severe or the impact of the infringement will have a prolonged effect, the Control Body should prohibit the operator concerned from marketing organic products for a period agreed with the Competent Authority (Defra). This could be an operator further up the supply chain from where the original testing took place (e.g. the product was tested at the processing stage but the prohibited product was added during the production stage). Where this operator is certified by a different organic Control Body, that Control Body and the Control Body involved with the testing should discuss whether the requirements of Article 30(1) should be applied and how this will be undertaken.

35. The Control Body will also need to decide whether any action needs to be taken further down the supply chain. Where some of the affected product is now with retailers, the Control Body will wish to consider whether the product should remain on sale or be withdrawn. This should be judged on a case-by-case basis and would depend on the level of prohibited substance in the product. Where the level of prohibited product is above the MRL or could be a danger to human/ animal health, the product should be withdrawn immediately and the CRD should be informed.

Sharing of information between Control Bodies

36. Defra, as the UK Competent Authority, requires that the following details should be included when information on any cases of irregularities or infringements affecting the organic status of a product are shared in accordance with Article 30(2) of Regulation 834/2007:

The name of the product;

The relevant batch number or numbers;

The name of the operator concerned;

Details of the infringement or irregularity (including the date of testing, the prohibited substance(s) being tested, the location of product tested and the test results);

The source of the product;

The date on which the organic status of the product was withdrawn.

37. The information should be shared by an appropriate means, including e-mail, within 48 hours (including non working days) of the organic status of the product being withdrawn.

Annex A

Procedures for taking samples of specific products

Paragraph 13 of the guidance for Control Bodies sets out the general procedure for taking samples of organic products. There follows guidance on procedures for taking samples of specific products. Please note that this is based on a proposal from one of the Control Bodies but we would welcome views and alternative proposals from other Control Bodies and operators.

1. Taking samples from cereals stores

Inspectors should follow the following procedures when taking samples from cereals stores (including storage of pulses and seed):

- a sampling spear should be used whenever possible; where this is not possible, a trowel should be used;
- in order to ensure that the lot is homogenous, the product in the silo cell should be circulated, if possible, and, samples should be taken during circulation. Where circulation is not possible, primary samples should be taken from as far from the surface as can be reached;
- 3 primary samples should be taken if the lot is less than 50kg, 5 primary samples if the lot is between 51-500kg, 10 primary samples if the lot is between 501-2,000kg and 15 primary samples if the lot is more than 2,000kg;
- each primary sample should be approximately 0.5kg;
- three 1kg samples for testing should be taken from this bulk sample and put into a clean plastic bag and sealed with a tamper evident seal.

2. Taking samples of fresh and bulk products

Inspectors should follow the following procedures when taking samples from fresh and bulk products:

- primary samples from different areas (e.g. different boxes of product) should be collected but they must keep to the correct lot. Details of the number of samples

- different lots should not be mixed and goods within 0.5m of external surfaces and the upper surface of bulk bins should be avoided;
- any damage or deterioration of the sample should be avoided and no portion of the product should be cut or broken as this would affect residue levels;
- the primary samples for each lot should be combined to form a bulk sample;
- each bulk sample should be divided into three samples for testing and placed in a clean plastic bag with a tamper evident seal.

3. Taking samples of pre-packaged goods

Inspectors should follow the following procedures when taking samples from pre-packaged goods:

primary samples should be collected from different areas (e.g. different boxes) but they must keep to the correct lot. Details of the number of samples that should be taken and the sizes of laboratory samples for fresh and bulk products are provided at Annex C;

any damage or deterioration of the sample should be avoided and no portion of the product should be cut or broken as this would affect residue levels;

the primary samples for each lot should be divided into three samples for testing.

4. Taking samples of crops/ tissue

Inspectors should follow the following procedures when taking samples of crops or tissue:

- every sampling situation must be evaluated prior to commencement so as to avoid those parts of the lot which are likely to be highly variable, but to ensure that the rest of the lot is represented in the sample;
- specifically diseased, infested product, mechanically damaged product and product that has been heavily shaded should be avoided unless this is typical of the lot;
- avoiding approximately 2m at the edge of the field/ lot, divide the field/ lot into eight sections(preferably square sections rather than strip sections);
- **For plants/ crops** – take one primary sample per section, ensuring that one whole plant or the product of one plant is taken. For fruiting crops, ensure that product is taken from both sides of the plant as well as upper and lower fruits;

- **For tissue samples** – take one primary sample per section. When taking a primary sample, select only upper mature leaves.

- the primary samples should be combined to make a bulk sample. They should be mixed on a clean sheet of polythene or in a clean bucket and one crop should be taken randomly for the laboratory sample, one for the retained sample for the licensee and one for the retained sample for the CB's office (paragraph 11 refers).

5. Taking soil samples

Inspectors should follow the following procedures when taking samples from soils:

- the field/ lot should be visually split into 4ha blocks and the inspector should walk in a 'W' shape, taking primary samples along the arms of the 'W'. Headlands and any unrepresentative areas should be avoided e.g. gateways and water troughs;

- the number of samples taken will depend on the size of the field/ lot but as a guide for each 4ha block, 8 primary samples should be taken;

- each primary sample taken should consist of the top 150mm of soil and should be approximately 0.5kg.

- a clean trowel of auger should be used and the samples should be placed in a clean bucket or clean polythene bag.

- stones, bulky plant material and soil fauna should be removed from the samples as they are taken;

- all primary samples from each 4ha block should be combined and mixed together on a plastic sheet by rolling the soil about;

- three samples for testing of 0.5kg each should be taken from this and put into a clean plastic bag and sealed with a tamper evident seal.

6. Taking swab samples

This method can be used for sampling product contact surfaces for the presence of pest control substances such as actellic. Inspectors should follow the following procedures when taking such samples:

- inspectors should identify the surface they want to swab e.g. part of a building fabric such as walls/ floors or a piece of equipment such as a grain bin, conveyor, intake pit or loading bucket;

- a paper towel should be dampened with a wetting agent (e.g. pure ethanol/ surgical spirit or water) and placed in a sample pot as a control. This should be

done three times so there are control samples for the licensee, laboratory and for the Control Body;

- dampen another towel with the liquid and swab the area to be tested roughly over an area 10cm x 10cam and place the towel in a second sample pot. This should be undertaken in triplicate (when swabbing the replica samples adjacent swab areas should be chosen; the same area should not be swabbed more than once as the residues will have been removed the first time);

- one control and one sample should be left for the licensee, one control and one sample should be left for the Control Body and one control and one sample for the laboratory.

7. Taking wooden storage box samples

Inspectors should follow the following procedure when sampling wooden storage boxes for substances e.g. chlorpropham:

- wood shavings should be taken with clean gloves, using a clean knife from 10 storage boxes from different places;

- approximately 300g of shavings should be taken in total and mixed up in a bag using the gloved hand. This is the bulk sample;

- the bulk sample should be split into three sub-samples. Approximately 100g of the mixed shavings should be placed in one bag and a tamper evident seal should be tightly tied around it. 100g of the mixed shavings should then be placed into another bag and tied with a tamper evident seal. A tamper evident seal should then be placed around the remaining 100g.

8. Taking liquid samples

Inspectors should follow the following procedure when taking liquid samples:

- inspectors should ensure that the inside of the cap and bottle are not touched at any time;

- if the sample is taken from a tap, the aspirator should be removed and the tap allowed to run for 2-3 minutes. The flow should be adjusted to keep the water from splashing when filling the bottle;

- the volume of sample should be sufficient to carry out all tests required, preferably not less than 100ml;

- when collecting the sample, the bottle should be held near the base of the sampling site and filled without rinsing;

- enough air space should be left in the bottle to allow proper mixing of the water sample;
- immediately place the cap on the bottle so it is tamper evident and place in a zip-lock bag , which is then sealed, concertinaed and sealed further with a plastic seal placed around the bag;
- this should be repeated twice so there are three similar samples from the sample place/ lot.

Annex B

Minimum numbers and sizes of samples

1. fresh and bulk products – minimum number of primary samples and minimum size of laboratory samples

Table 1. Minimum number of primary samples to be taken from a lot

(partly taken from Codex 'recommended methods for sampling for the determination of pesticide residues for compliance with MRLs CAC/GL 33-1999')

	Minimum number of primary samples to be taken from a lot
Products loose or in bulk Either: Weight of lot, kg <50 50-500 >500	 3 5 10

Table 2. Size of laboratory samples: Samples sent to the laboratory should not be lower than the weights listed below (information obtained from Eclipse Scientific laboratory).

Unprocessed foods of plant origin:

Classification	Examples	Minimum size of each laboratory sample
Small sized fresh products (each less than 25g)	Berries Peas	

	Olives	1kg
Medium sized fresh products (each generally 25 to 250g)	Apples Oranges Carrots Small/ med potato	 1kg (min 3 items)
Large sized fresh products (generally more than 250g each)	Cabbages Cucumbers Bunch of grapes Melons V. large potatoes	 2kg (min 2 items)
Pulses	Dried Beans Dried peas Lentils	 1kg
Cereal Grains	Rice Wheat	 1kg
Tree Nuts	Coconuts All others	5 items 1kg
Oilseeds	Peanuts	0.5kg (500g)
Herbs	Fresh parsley Other fresh herbs	0.5kg (500g) 0.2kg (200g)

Processed foods of plant origin:

Classification	Examples	Minimum size of each laboratory sample
Solid products of low bulk	Tea	0.2kg (200g)
Other solid products	Bread Flour Dried fruit	0.5kg (500g)
Liquid products	Vegetable oil Juices	0.5 litre (500mil) or 0.5kg

Primary foods of animal origin:

Classification	Examples	Minimum size of each laboratory sample
Eggs, except quail and similar	Chicken eggs Duck eggs	12 whole eggs 6 whole eggs
Eggs, quail and similar	Quail eggs	24 whole eggs
Milk	Whole cow's milk	0.5 litre (500 ml)

Processed foods of animal origin:

Classification	Examples	Minimum size of each laboratory sample
Milk powders, dairy ice creams, yoghurts, evaporated milk, cream	See classification	0.5 litre (500ml) liquid 0.5kg (500g) solid
Butter and butteroils	Butter	0.2kg (200kg)

	Low fat spreads	
Cheese (including processed cheeses)	Units of 300g or more Units of less than 300g	0.5kg (500g) 0.3kg (300g)

2. Pre-packaged goods – minimum number of primary samples and minimum size of laboratory samples

Table 1. Minimum number of primary samples to be taken from a lot

(partly taken from Codex 'recommended methods for sampling for the determination of pesticide residues for compliance with MRLs CAC/GL 33-1999')

	Minimum number of primary samples to be taken from a lot
Packaged products Either: Weight of lot, kg <50 50-500 >500 or Number of cans, cartons or other containers in the lot 1-25 26-100 >100	 3 5 10 1 5 10

Table 2. Size of laboratory samples: Samples sent to the laboratory should not be lower than the weights listed below (information obtained from Eclipse Scientific laboratory).

Fresh fruit and vegetables:

Classification	Examples	Minimum size of each laboratory sample
Small sized fresh products (each less than 25g)	Berries Peas Olives	1kg
Medium sized fresh products (each generally 25 to 250g)	Apples Oranges Carrots Small/ med potato	1kg (at least 10 items)
Large sized fresh products (generally more than 250g each)	Cabbages Cucumbers Bunch of grapes Melons V. large potatoes	2kg (at least 5 items)
Pulses	Dried Beans Dried peas Lentils	1kg
Cereal Grains	Rice Wheat	1kg
Tree Nuts	Coconuts	5 items

	All others	1kg
Oilseeds	Peanuts	0.5kg (500g)
Herbs	Fresh parsley Other fresh herbs	0.5kg (500g) 0.2kg (200g)

Processed foods of plant origin:

Classification	Examples	Minimum size of each laboratory sample
Solid products of low bulk	Tea	0.2kg (200g)
Other solid products	Bread Flour Dried fruit	0.5kg (500g)
Liquid products	Vegetable oil Juices	0.5 litre (500ml) or 0.5kg

Primary foods of animal origin:

Classification	Examples	Minimum size of each laboratory sample
Eggs, except quail and similar	Chicken eggs Duck eggs	12 whole eggs 6 whole eggs
Eggs, quail and similar	Quail eggs	24 whole eggs
Milk	Whole cow's milk	0.5 litre (500ml)

Processed foods of animal origin:

Classification	Examples	Minimum size of each laboratory sample
Milk powders, dairy ice creams, yoghurts, evaporated milk, cream	See classification	0.5 litre (500ml) liquid 0.5kg (500g) solid
Butter and butteroils	Butter Low fat spreads	0.2kg (200g)
Cheese (including processed cheeses)	Units of 300g or more Units of less than 300g	0.5kg (500g) 0.3kg (300g)