

**STANDARD OPERATING PROCEDURE ON SAMPLING AND ANALYSIS OF  
AGRICULTURAL PRODUCTS OF PLANT ORIGIN TO DETERMINE AGRO-  
CHEMICAL RESIDUE LEVELS AND RISK MANAGEMENT AS PART OF EXPORT  
INSPECTION AND CERTIFICATION IN TERMS OF THE AGRICULTURAL  
PRODUCT STANDARDS ACT**

**INDEX**

Page

1.	OBJECTIVE .....	2
2.	SCOPE.....	2
3.	DEFINITIONS.....	2
4.	REFERENCE TO REGULATORY REQUIREMENTS AND OTHER INTERNATIONAL DOCUMENTS.....	6
5.	ROLE-PLAYERS, ROLES AND RESPONSIBILITIES .....	6
6.	PRESCRIBED RESIDUE SAMPLING FREQUENCY .....	11
7.	SAMPLING PROCEDURES FOR REPRESENTATIVE SAMPLING OF CONSIGNMENTS .....	14
8.	HANDLING AND DISPATCHING OF SAMPLES.....	18
9.	RECORD KEEPING OF SAMPLES .....	19
10.	ANALYSIS.....	20
11.	REPORTING OF RESULTS AND STATISTICAL DATA.....	20
12.	EVALUATION OF COMPLIANCE .....	21
13.	HANDLING PROCEDURES FOR CONSIGNMENTS (A) EXCEEDING THE PRESCRIBED EXPORT MRL'S, AND (B) ON WHICH AGRO-CHEMICALS HAVE BEEN FOUND WHICH ARE NOT REGISTERED IN TERMS OF ACT 36 OF 1947 .....	21
14.	APPEAL PROCEDURES .....	26
15.	HANDLING OF COMPLAINTS FROM IMPORTING COUNTRIES (NON- CONFORMITIES).....	27
16.	ANNEXURES .....	30
17.	CONTRACT REVIEW .....	30
18.	RECORDS .....	30

## 1. OBJECTIVE

To manage the sanitary risk (food safety) of regulated agricultural products of plant origin intended for export by monitoring compliance with maximum agro-chemical residue levels based on importing countries requirements, export default lists compiled by Department of Agriculture, Forestry and Fisheries (DAFF) and Regulation R707 of 13 May 2005.

## 2. SCOPE

The Standard Operating Procedure (SOP) shall be followed by all personnel of the DAFF and relevant assignees involved in the monitoring of compliance of agro-chemical residues permitted in or on regulated agricultural products of plant origin presented for export inspection and certification. The SOP shall include procedures for sampling, handling, analysis, dissemination of results, evaluation of compliance, traceability and follow-up of non-compliance, recall and risk communication to all relevant role-players and stakeholders.

## 3. DEFINITIONS

Where used with regard to sampling and analysis --

- 3.1 **"agro-chemical residue"**: the residues of agricultural remedies (insecticides, herbicides, fungicides, heavy metals and plant growth regulators, etc) and include banned or restricted substances;
- 3.2 **"assignee"**: a person, undertaking, body, institution, association or board designated under section 2(3) of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
- 3.3 **"bulk sample/aggregate sample"** (also referred to as the "inspection sample" in the export standards and requirements): the combined and well-mixed aggregate of the primary samples taken from a consignment;

- Note:*
- (a) *The primary samples must contribute sufficient material to enable all laboratory samples to be withdrawn from the bulk sample.*
  - (b) *Where separate laboratory samples are prepared during collection of the primary sample(s), the bulk sample is the conceptual sum of the laboratory samples, at the time of taking the samples from the consignment.*

3.4 **"consignment"**: a quantity of a specific agricultural product of plant origin which -

- (a) belongs to the same owner, delivered at the same time under cover of the same delivery note, consignment note or receipt note, or delivered by the same vehicle; or
- (b) if subdivided into different cultivars, classes, sub-classes, grades, types, counts, count groups, type groups, size groups, colour groups, diameter groups, production groups, diameter codes, size codes, production lots, pallet loads, trade marks, packaging sizes or types of packaging in every quantity of each of the different cultivars, classes, sub-classes, grades, types, counts, count groups, type groups, size groups, colour groups, diameter groups, production groups, diameter codes, size codes, production lots, pallet loads, trade marks, packaging sizes or types of packaging;

3.5 **"Executive Officer (EO)"**: the officer designated under section 2(1) of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);

3.6 **"Food Business Operator (FBO)"**: the person or persons responsible for ensuring that the prescribed requirements of these standards are met within the food business under his or her control and include both the management of the food business as well as the person with overall authority on site or in the specific establishment;

3.7 **"Food Business Operator Code (FBO)"**: an alpha-numeric code which has been registered with the Executive Officer of the APS Act by each producer, packhouse packing fruit and vegetables and all other FBO's destined for export;

3.8 "**inspector/ assessor**": means an assignee or a qualified employee of an assignee;

3.9 "**laboratory sample**": the sample sent to, or received by, the laboratory and which shall consist of a representative quantity of material removed from the bulk sample;

- Notes:*
- (a) *The laboratory sample may be the whole or a part of the bulk sample.*
  - (b) *Units should not be cut or broken to produce the laboratory sample(s).*
  - (c) *Replicate laboratory samples may be prepared.*

3.10 "**maximum microbiological contamination limit**": means the maximum microbiological contamination legally permitted in or on agricultural products of plant origin;

3.11 "**maximum residue limits (MRL)**": the maximum concentration of a pesticide residue (expressed as mg/kg) legally permitted in or on agricultural products of plant origin;

3.12 "**microbiological contamination**": refers to the non-intended or accidental introduction of microbes such as bacteria, yeast, mould, fungi, virus, prions, protozoa or their toxins and by-products;

3.14 "**Pome fruit central management unit (CMU)**": means a person or an institution that ensures that constituent members (Food Business Operators - PUC and / or PHC) are compliant with the stipulated maximum residue limits of South Africa and of the importing country;

3.15 "**primary sample/incremental sample**" (also referred to as the "sample of the consignment" in the export standards and requirements): a volume or mass or one or more units taken from one randomly in a consignment;

- Notes:*
- (a) *The position from which a primary sample is taken in the consignment should preferably be chosen randomly but, where this is physically impractical, it should be from a random position in the accessible parts of the consignment.*

- (b) *The number of units required for a primary sample should be determined by the minimum size and number of laboratory samples required.*
- (c) *Where more than one primary sample is taken from a consignment, each should contribute an approximately similar proportion to the bulk sample.*
- (d) *Units should not be cut or broken to produce the primary sample(s).*
- (e) *Where primary samples are taken at intervals during loading or unloading of a consignment, the sampling 'position' is a point in time.*

- 3.16 **"Production Unit Code" (PUC)**: means any facility or food business unit or sub-unit that is used for the production of food, which needs to be uniquely identified. Examples include farms, orchards, blocks, fields, tunnels or hot houses;
- 3.17 **"sample"**: one or more units selected from a population of units, or a portion of material selected from a larger quantity of material. For the purposes of these recommendations, a representative sample is intended to be representative of the consignment, the bulk sample, etc., **in respect of its agro-chemical residue content** and not necessarily in respect of other attributes;
- 3.18 **"sampling"**: the procedure used to draw and constitute a sample;
- 3.19 **"sampling device"**: a tool prescribed by legislation in terms of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
- 3.20 **"sample size"**: the number of units, or quantity of material, constituting the sample; and
- 3.21 **"unit"**: the smallest portion in a lot, which should be withdrawn to form the whole or part of a primary sample.

- Notes:*
- (a) *Fresh fruit and vegetables - Each whole fruit, vegetable or natural bunch (e.g. grapes) should form a unit. Individual fresh fruit or vegetables must not be cut or broken to produce units.*
  - (b) *Packaged materials - The smallest entity of packaging should be taken as units. Where the smallest packages are very large, they should be*

*sampled as bulk, as set out in paragraph (c). Where the smallest packages are very small, a pack of packages may form the unit.*

- (c) *Bulk materials and large packages (such as drums, bags, etc.) which are individually too large to be taken as primary samples - The units are created with a sampling device.*

#### **4. REFERENCE TO REGULATORY REQUIREMENTS AND OTHER INTERNATIONAL DOCUMENTS**

- 4.1 All relevant current South African (SA) Guidelines and export standards shall be adhered to at all times.
- 4.2 All relevant and current European Union (EU) Directives and Codex Alimentarius Standards shall be adhered to at all times.

#### **5. ROLE-PLAYERS, ROLES AND RESPONSIBILITIES**

##### **5.1 Assignee**

Assessor or Inspector of the assignee is responsible for executing the following actions:

- (a) Taking at random a representative sample from the consignment concerned and in accordance with the prescribed sampling procedure (Refer to item 7).
- (b) Completing the inventory list and forwarding it in the agreed standard electronic format via e-mail or by fax or by courier to the laboratory concerned.
- (c) Completing the correct label sticker with information specific to the sample concerned and attaching it to each sample bag that contains the sample as indicated in Annexure B.
- (d) Dispatching the samples to the laboratory (As prescribed in item 8).

- (e) Once final analysis results are received from the laboratory, the assignee will interpret it. Forward the results to the producer or packhouse and/or exporter on request.
- (f) Taking the necessary actions if the MRL's are exceeded (Refer to item 13 on Recall Procedure).
- (g) Taking of further samples if and when required in accordance to sampling procedure.
- (h) Develop, update and maintain a database of registered CMU along with their quality management systems.

## 5.2 Laboratories

- (a) Analysis for agro-chemical residues will be done at the National Reference Laboratories (NRL) and Officially Recognised Laboratories (ORL) (refer to Annexure D for the list of Laboratories).
- (b) The laboratories are responsible for executing the following actions:
  - (i) Receiving of the samples forwarded by the assignee and entering the details in a logbook.
  - (ii) Relevant Laboratory must confirm receipt of samples within 24 hours period per logsheet.
  - (iii) Analysis of the laboratory samples in accordance with the relevant Quality Assurance procedures.
  - (iv) Forwarding the final analysis results in the agreed standard electronic format to the assignee and within the agreed time from receipt of the samples, i.e. four working days.



- (v) Review the agro-chemical residues testing profile annually with the Executive Officer: APS Act and in consultation with the relevant producer group.
- (vi) Liaise internationally with regard to analytical testing methodologies.
- (vii) The National Reference Laboratory shall issue an official residue certificate, when requested, in order to satisfy special requirements from the competent authorities of importing countries.
- (viii) Keep the retention sample in a satisfactory condition for at least 15 working days for the purpose of a repeat analysis should the need arise.
- (xi) Participate in the National Metrology Institute of South Africa (NMISA) proficiency tests.

*PLEASE NOTE: Samples are received, analysed and reported by the laboratory as prescribed by the Quality Assurance System of the specific laboratory that is in compliance with the ISO/IEC 17025 standard namely, "General requirements for the competence of testing and calibration laboratories".*

### 5.3 Directorate: Food Safety and Quality Assurance

- (a) Update lists, where relevant, with the latest MRL's after consultation and inputs of the relevant industries and agro-chemical companies.
- (c) The divisional head of each division within the Directorate: Food Safety and Quality Assurance should provide the laboratories as well as the assignee with the latest MRL export lists for each agricultural product of plant origin destined for export and make it available on the DAFF website (In the case of fresh fruit, such information should be provided at least two months in advance of the start of the harvesting season for the fruit

concerned). The list of MRL values will be used as standards by the laboratories as a guide to decide on additional tests for confirmation of test results.

- (d) Liaise with the Department of Health (DoH) and Directorate Agricultural Inputs Controls (AIC) with regard to any enquiries received from producers, packers or exporters on the analysis results of samples.
- (e) Liaise internationally –
  - (i) to clarify the policy, status of an agro-chemical or MRL in an importing country; and
  - (ii) with regard to non-conformities.

#### 5.4 Exporters

- (a) To provide producers and packhouses with relevant importing country MRL requirements. To ensure that export produce complies with MRL requirements of importing countries.
- (b) To inform the Directorate: Food Safety and Quality Assurance (D: FSQA) of the Department of Agriculture, Forestry and Fisheries (DAFF) and the affected parties in writing, within 3 working days after being informed, of any rejections by importing country authorities due to residues and to furnish the following information:
  - (i) Name of importing country.
  - (ii) Reason for rejection.
  - (iii) Contact details of exporter/producer.
  - (iv) Details on specific consignment.
  - (v) Export certificate number.
  - (vi) Any other details in relation to the rejection.

- (b) To recall, destroy or re-route consignments should residue results indicate non-compliance as per item 13.

#### 5.5 Producers, packers and handlers

- (a) Apply registered agro-chemicals according to manufacturer instructions regarding application, dosages and withholding periods, etc.
- (b) Keep record of the agro-chemicals (including dosages and withholding periods) used in spray programs and as post harvest treatment and to provide this information on request to the D: FSQA of DAFF.

#### 5.6 Pome fruit central management unit

5.6.1 An FBO that wishes to be recognised as a CMU shall apply for registration to the assignee and provide the following information:

- (a) The name of the person responsible for the institution;
- (b) Commodity/ies handled;
- (c) Quality management system;
- (d) Spray program;
- (e) Exhaustive list of members that the CMU is responsible for; and
- (f) Post-harvest treatment used by the pack house.

5.6.2 The CMU shall notify the assignee whenever the status or list of their registered members changes.

5.6.3 The CMU shall share analytical results with the assignee and Head of Analytical Laboratory Service from time to time.

5.6.4 The CMU shall ensure that its members complies with the set MRL`s of SA and of the importing countries.

5.6.5. Keep records of the information relating to analytical tests and quality management system as well as any other relevant information for at least two years.

## 6. **PRESCRIBED RESIDUE SAMPLING FREQUENCY**

### 6.1 General

- (a) Sampling shall only be done by an inspector or assessor.
- (b) Only consignments presented for export shall be sampled for agro-chemical residue testing.
- (c) Bulk samples of a product shall --
  - (i) in the case of fresh fruit and vegetables, be withdrawn in such a way that it is possible to trace it back to a Production Unit Code (PUC)-FBO code, and as far as possible be distributed to include different cultivars; or
  - (ii) in the case of other products, be withdrawn in such a way that it is possible to trace it back to the lowest level of traceability of the consignment presented for inspection (e.g. silo bin, processing plant, producer, owner, exporter).

### 6.2 Initial sampling

- (a) At the start of the season sampling will be done for each product per PUC presented for export. Frequency thereafter: PUC per product should be sampled every three weeks or at least twice per season.
- (b) The Analytical results of the initial sampling shall be used as a base for further sampling in case of non-compliance. If a non compliance was identified at the end of the season it shall be followed up at the beginning of the next season.

### 6.3 Further sampling in the case of non-compliance of initial sampling

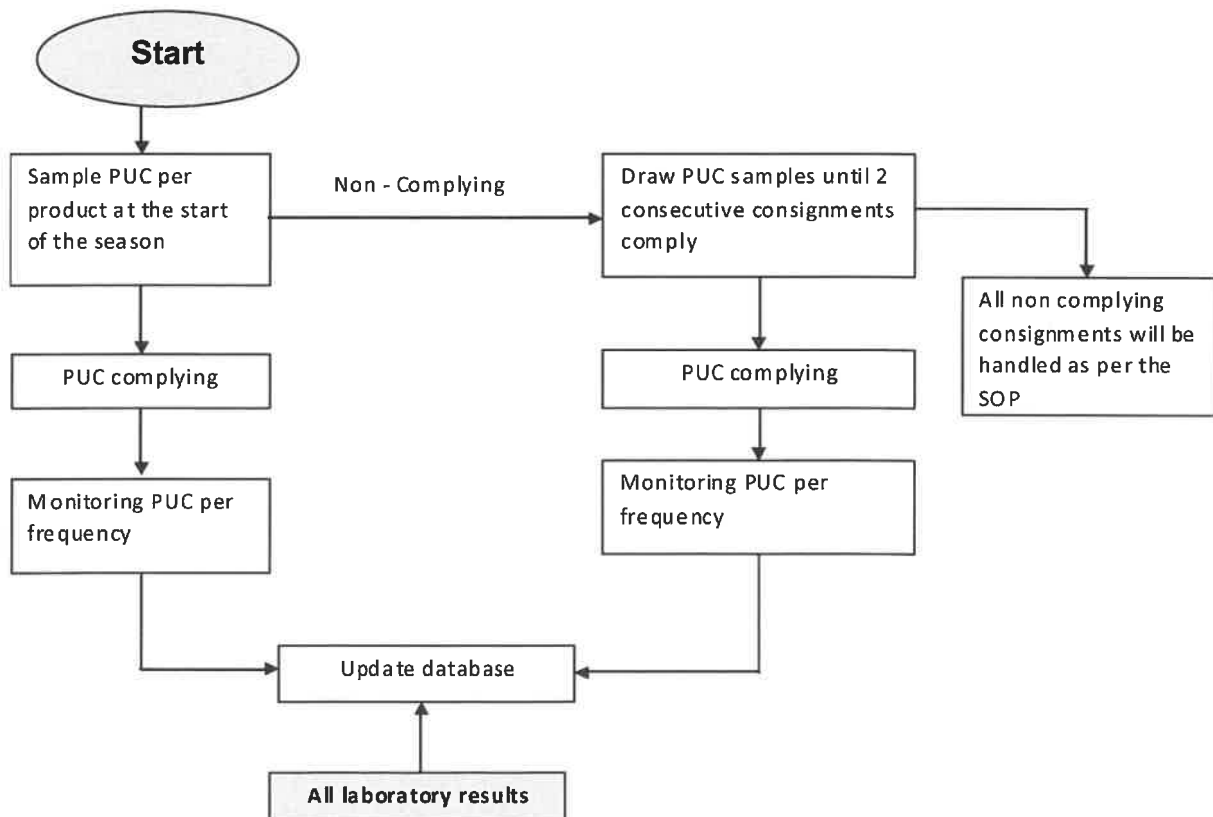
- (a) If the analysis results of the initial sampling indicate that one or more of the agro-chemical residues found exceed the maximum residue levels, the sampling frequency shall be tightened/increased to include at least two follow-on consignments presented for inspection.
- (b) Only if the analysis results of at least two consecutive consignments sampled in paragraph (a) above indicate that the agro-chemical residues found are within the maximum residue levels, the sampling frequency will be reduced to a monitoring level.
- (c) Monitoring level shall be at least two samples per FBO, per product depending on the volume for export.
- (d) In the circumstance, an FBO has taken a sample from the export ready consignment to an official recognised laboratory and it is found that the analytical results obtained differs from the official sample drawn by the assignee, the analytical results that favours the FBO shall be applicable: Provided that two different recognised laboratories have been used for the analytical tests.

### 6.4 Frequency of sampling in the case of Central Management Unit

- (a) Paragraph 6.2 and 6.3 shall be used to determine whether a CMU is 100% compliant or not. The determination shall be inclusive of the test relating to Indonesia and other countries.
- (b) At the end of the pome fruit export season (recommended as October or November due to the overlap in seasons resulting from long term storage) the assignee shall conduct an annual review per CMU to evaluate its compliance over the past twelve months, based on the test results generated by the laboratory as well as non-conformity received from importing countries.

- (c) Once, it is established that the CMU is 100% compliant, an approval for recognition shall be granted by the assignee in a form of a certificate. The copy of the certificate shall be shared with the EO and the Head of Analytical Laboratory Service.
- (d) The approval of recognition for the CMU means that the frequency of sampling will be reduced to one random sample per CMU per month.
- (e) In the event that non-conformity with the set South African MRLs or that of the importing country is found, the recognition of the CMU shall be withdrawn. The withdrawal Notice shall be sent to the CMU, EO and Head of Analytical Laboratory Service.
- (f) The sampling frequency shall revert to paragraph 6.2 until such time that the assignee has satisfied itself of the outcome of the review at the end of the next pome fruit cycle.

#### 6.5 Schematic representation of sampling frequency



## 7. SAMPLING PROCEDURES FOR REPRESENTATIVE SAMPLING OF CONSIGNMENTS

### 7.1 Precautions to be taken

- (a) During sampling of agricultural plant products for analytical purposes, every precaution should be taken to prevent contamination and deterioration of the samples or subjecting the samples to such changes that the residue content thereof is affected (See item 8.1 on the "Handling and Dispatching of Samples").
- (b) Each laboratory sample sent to the laboratory shall represent a consignment.

### 7.2 Collection of primary samples ("sample of the consignment")

- (a) Each primary sample should be taken from a randomly chosen position in the consignment, as far as practically possible.
- (b) The primary samples should consist of sufficient material to provide the laboratory sample(s) required.
- (c) The minimum number of primary samples to be taken from the consignment shall be as follows in cases where --
  - (i) plant products, either packaged or in bulk, can be assumed to be well mixed or homogeneous:

1 (one) primary sample

*Note: [A consignment may be mixed by e.g. grading or manufacturing processes].*

- (ii) plant products, either packaged or in bulk, are not well mixed or homogeneous:

(aa) The total weight of the consignment is known:

<b>Weight of the consignment (kg)</b>	<b>Minimum number of primary samples to be taken from the consignment</b>
< 50 kg	3
50 - 500 kg	5
> 500 kg	10

(bb) The total number of containers (cans, cartons or other types of containers) in the consignment is known:

<b>Number of containers in the consignment</b>	<b>Minimum number of primary samples to be taken from the consignment</b>
1 - 25	1
26 - 100	5
> 100	10

*Note: For products comprised of large units, being commodities of plant origin only, the minimum number of primary samples should comply with the minimum number of units required for the laboratory sample as set out in item 7.4(c).*

### 7.3 Preparation of the bulk sample ("inspection sample")

- (a) The primary samples should be combined and/or mixed well, if practically possible, to form the bulk sample.

### 7.4 Preparation of the laboratory samples

- (a) Laboratory samples should be taken randomly from the bulk sample.
- (b) Where the bulk sample is larger than is required for a laboratory sample, it should be divided to provide a representative portion. A sampling device, quartering, or other appropriate size reduction process may be used but units of fresh plant products should not be cut or broken.



Where required, replicate laboratory samples should be withdrawn at this stage or it may be prepared using the alternative procedure (sampling device, quartering, etc.) described above.

(c) The minimum size required for laboratory samples is as follows:

PRODUCT	EXAMPLES	NATURE OF PRIMARY SAMPLES TO BE TAKEN	MINIMUM SIZE OF EACH LABORATORY SAMPLE
1. Fresh products of plant origin			
(a) All fresh fruit and vegetables			
(i) Small (<25 g)	Peas	Whole units, or packages, or units taken with a sampling device	1 kg
(ii) Medium (25-250 g)	Apples, oranges	Whole units	1 kg (at least 10 units)
(iii) Large (>250 g)	Cabbage, cucumbers, grapes (bunches)	Whole unit(s)	2 kg (at least 5 units)
(b) Pulses	<b>Dried beans, dried peas</b>		1 kg
Cereal grains	Wheat		1 kg
Oilseeds	Peanuts		0,5 kg
2. Processed products of plant origin			
(a) Products of high unit value	As determined from time to time by the Executive Officer	Packages or units taken with a sampling device	0,1 kg*
(b) Solid products of low bulk	Rooibos	Packaged units or units taken with a sampling device	0,2 kg
(c) Other solid products	Bread, flour, dried fruit	Packages or other whole units, or units taken with a sampling device	0,5 kg
(d) Liquid products	Fruit juices, pulp and puree	Packaged units or units taken with a sampling device	0,5 litre or 0,5 kg

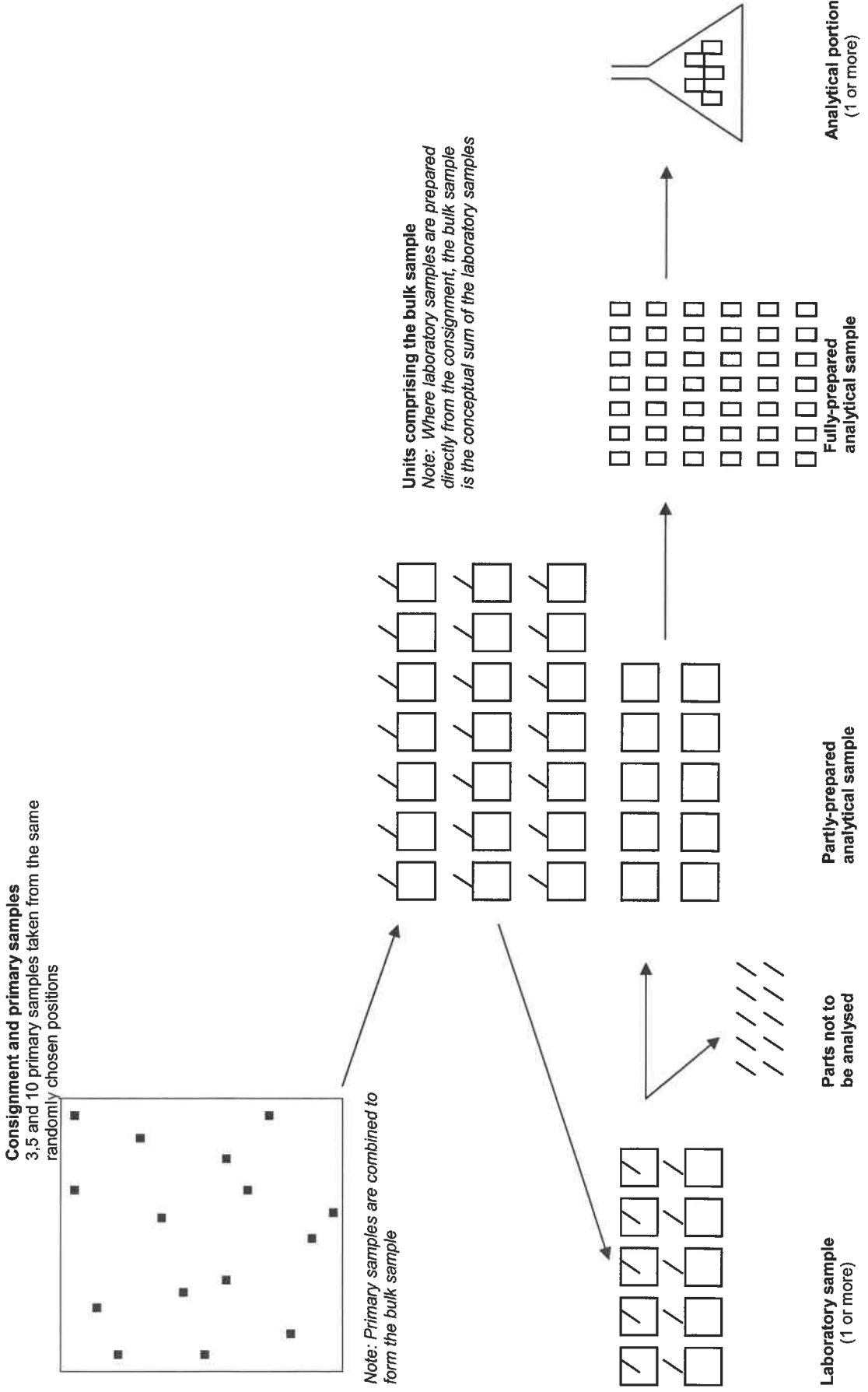
Note:

\*

*A smaller laboratory sample may be taken from a product of exceptionally high value: Provided that the reason(s) for doing so should be noted in the sampling record.*

7.5 Schematic representation

**SCHEMATIC REPRESENTATION OF SAMPLING PROCEDURES**



## 8. HANDLING AND DISPATCHING OF SAMPLES

### 8.1 General

- (a) The person responsible for taking the samples should always where possible use clean hands prior to sampling.
- (b) Samples must be handled as little as possible and should be placed as soon as possible in the sample bags or containers in which it will be dispatched.
- (c) All samples should be placed in clean sample bags (approved by DAFF or assignee) which are large and strong enough to ensure that the samples are delivered intact to the laboratory. A hard copy of the inventory must be included in the container. Care should be taken not to overfill the sample bags.
- (d) Sample bags or containers in which samples are placed should be sealed to prevent contamination from the outside. Each sample bag should be folded down repeatedly to remove the air inside as far as possible and should be stapled on the folds.
- (e) To prevent damaging of the fruit or sample bag, not too many samples should be dispatched in the same outer container.
- (f) Samples shall not be exposed to high temperatures and should, where possible, be stored under refrigeration or at least in a cool place before being dispatched to the laboratory.
- (g) Samples must reach the laboratory in a good condition within two working days after sampling.
- (h) Samples shall be stored out of direct sunlight at the laboratories.

## 8.2 Urgent samples

- (a) Only samples from consignments that have been held back from export awaiting the analysis results may be marked with red "Urgent" stickers.

Only in exceptional cases and only if prior arrangements have been made with the laboratory may other samples be marked as such.

- (b) Samples with red "Urgent" stickers will get preferential treatment if a signed motivation is given by the assignee's area manager.
- (c) The analysis results of samples marked as "Urgent" and which have been delivered to the laboratory before 10:00 shall be made available in two working days or as otherwise arranged with the laboratory.

## 9. RECORD KEEPING OF SAMPLES

### 9.1 Sampling record

- (a) An inventory list (see Annexure A as an example) of all the samples that are packed in an outer container and is sent to the laboratory shall be placed inside the outer container and not inside the sample bag.

The inventory list shall also be forwarded in the agreed standard electronic format via e-mail to the laboratory concerned and shall reach the laboratory within two working days after the samples have been dispatched. The information included in this inventory is copied directly into the database of the laboratory concerned.

- (b) Each container dispatched to the laboratory shall be placed on a separate inventory list to enable laboratory personnel to verify that all samples actually arrived at its destination. (The lab will acknowledge receipt of the samples as per inventory list.)

- (c) Each inventory list should be given a unique number in the following format:

**"Inventory AC-nnn"**

where

AC = area code; and

nnn = serial number

- (d) Each sample bag shall be attached with a sticker (see Annexure B as an example) which has to be with completed for each sample.

## 10. **ANALYSIS**

Analysis is done according to the procedures that are laid down in the Quality Assurance System of the particular laboratory.

*PLEASE NOTE: Samples are received, analysed and reported by the laboratory as prescribed by the Quality Assurance System of the specific laboratory that is in compliance with the ISO/IEC 17025 standard namely, "General requirements for the competence of testing and calibration laboratories".*

## 11. **REPORTING OF RESULTS AND STATISTICAL DATA**

### 11.1 **General**

- (a) The final analysis results shall be forwarded electronically in the agreed standard electronic format via e-mail by the laboratories to the head office of the assignee within four working days of receipt of the sample(s). An additional day will be given only in case of re-testing and extra samples.
- (b) PPECB shall submit summaries of all results to the Executive Officer and National Reference Laboratories on a weekly basis and in a format that has been mutually agreed to between the PPECB and DAFF.

- (c) A consolidated document of the analysis results, excluding any reference, will be forwarded at the end of every week by the laboratories to representative growers' associations where prior arrangements have been made.
- (d) The laboratories shall maintain a database of all results and shall compile an annual report on pesticide residues which shall provide an overview on the pesticides residues in products presented for export.

## **12. EVALUATION OF COMPLIANCE**

- 12.1 The assignee shall compare the results with the MRL's lists supplied by D: FSQA for each product to determine whether the product complies with the prescribed MRL's or not.
- 12.2 In the event, where an export default MRL is not provided for a given active ingredient on a specific product, it is the responsibility of the assignee to liaise with the relevant policy division of the D: FSQA of DAFF. Such query should include the sample reference number and country (ies) of destination. Feedback on such queries must be done in writing, via e-mail or fax to the assignee within 24 hours.
- 12.3 The assignee shall in the case of non-compliance follow the procedures set out in item 13.

## **13. HANDLING PROCEDURES FOR CONSIGNMENTS (A) EXCEEDING THE PRESCRIBED EXPORT MRL'S, AND (B) ON WHICH AGRO-CHEMICALS HAVE BEEN FOUND WHICH ARE NOT REGISTERED IN TERMS OF ACT 36 OF 1947**

- 13.1. In the circumstance, where a FBO has taken a sample from the export ready consignment to an official recognised laboratory and it is found that the analytical results obtained differs from the official sample drawn by the assignee, the analytical results that favours the FBO shall be applicable: Provided that two different recognised laboratories have been used for the analytical tests. If it is

found that the analytical results obtained differs from the official sample drawn by the assignee, the analytical results that favours the FBO shall be applicable.

### 13.2 Consignments exceeding the prescribed export default MRL's

Should the analysis results indicate that one or more of the agro-chemical residues found exceed the maximum residue limit, the procedures set out below shall be followed in the case of (a) non-shipped, and (b) shipped consignments respectively.

#### (a) Non-shipped consignments

The consignment concerned shall either be (i) rejected by the appointed assignee, or (ii) re-routed by the exporter.

##### (i) Rejected consignments

(aa) The assignee shall immediately notify the exporter/producer/packer concerned.

(bb) The assignee shall also immediately notify the relevant laboratory and the relevant Divisions of the Directorates: Inspection Services (IS) and Food Safety and Quality Assurance (FSQA) of the Department of Agriculture, Forestry and Fisheries.

(cc) If the rejected consignment also exceeds the local MRL and is not re-routed, D: IS shall then inform the following two Directorates in writing:

(aaa) The Directorate: Food Control of the Department of Health (DoH).

(bbb) The Directorate: Agricultural Inputs Control of the Department of Agriculture, Forestry and Fisheries

(ii) Re-routed consignments

The procedure set out in item 13.1(b)(ii) shall be followed.

(b) Shipped consignments

Consignments of which the analysis results were received after being shipped must either be (i) recalled or destroyed, or (ii) re-routed to another country where the established MRL is acceptable.

(i) Recalled or destroyed consignments

Exporters shall provide written proof to the assignee as well as the D: FSQA of DAFF that consignments were recalled or destroyed.

(ii) Consignments destined for re-routing

(aa) Exporters wishing to re-route consignments to another country where the established MRL is acceptable, must supply proof to the assignee as well as the D: FSQA of DAFF thereof in writing.

(bb) If the MRL of the importing country differs from the MRL prescribed by the D: FSQA of DAFF or is not prescribed, the D: FSQA shall verify the MRL in question and provide the assignee and exporter with a written permission or refusal.

(cc) The exporter shall upon receipt of such permission submit an affidavit to the assignee that certifies that the produce shall only be exported to the country/countries stated on the affidavit.



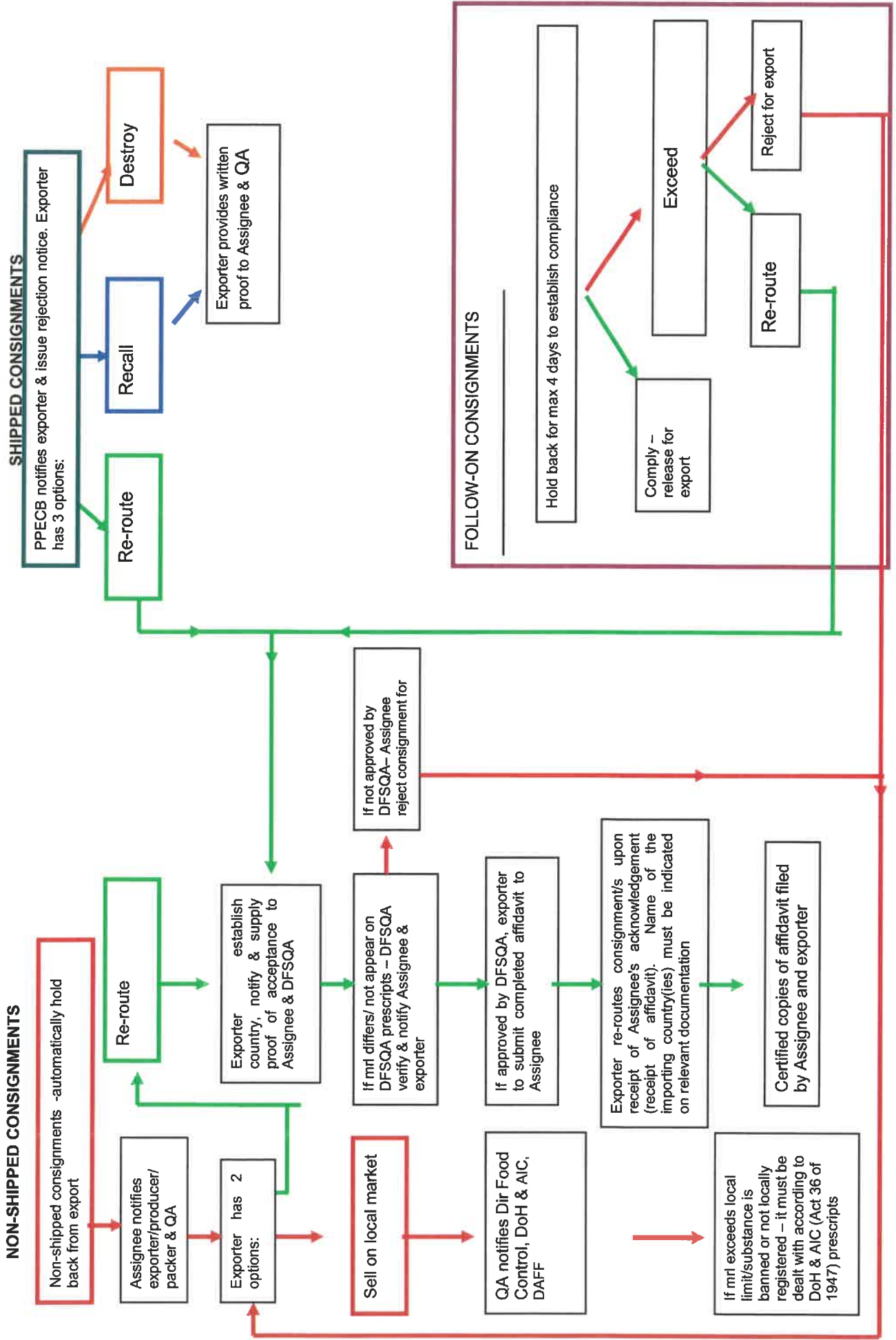
- (dd) Consignments may only be re-routed after the assignee has acknowledged receipt of the completed affidavit and by approving (signing and stamping) the document.
- (ee) Copies of the completed affidavit shall be kept by the exporter and the assignee.

(iii) Follow-on consignments

- (aa) Follow-on consignments of a producer whose consignment exceeded prescribed MRL's shall be held back from export for not more than four days in order to establish if it complies with the prescribed MRL's.
- (bb) If a consignment again exceeds any prescribed MRL's, the consignment will be rejected for export or re-routed as set out in item 13.1(b)(ii).
- (cc) In the case of compliance the consignment will be released for export.
- (dd) Consignments that exceeded the export as well as local MRL's must be dealt with in accordance with item 13.1(a)(i).
- (ee) In case if there is dispute between the assignee and the affected producers or exporters, the Standard Operating Procedure for Settling Disputes over Analytical Test Results shall be referred to for guidance.

(c) Schematic representation

**FLOW CHART: HANDLING PROCEDURES FOR CONSIGNMENTS EXCEEDING THE PRESCRIBED EXPORT MRL'S**



13.3 Consignments on which agro-chemicals have been found which are not registered in terms of Act 36 of 1947

- (a) In the event of a consignment on which an agro-chemical have been found which is not registered or which contains a banned or restricted substance, it must be dealt with according to the Department of Health and Directorate Agricultural Inputs Control prescripts.
- (b) Inform the inspector's at the Directorate Agricultural Inputs Control about the transgression.

**14. APPEAL PROCEDURES**

14.1 General

- (a) A producer or exporter may appeal against the results of the laboratory on the analysis of a sample analysed and MRL exceeded for the presence of agro-chemical residues.
- (b) The regulations regarding inspection and appeals as well as the prescribed appeal fees shall be applicable.
- (c) The selected appeal board shall, in the presence of the producer or exporter or their representative, withdraw a sample for analysis from the consignment in question according to sampling and handling procedures prescribed in this SOP.
- (d) The analysis shall be done at the producer's or exporter's expense and shall be paid to the Executive Officer.
- (e) Prior arrangements shall be made with the laboratory to, amongst others --
  - (i) assure availability of information required;
  - (ii) determine the costs involved;

- (iii) ensure that the analysis results are also made available to the Appeal Board; and
- (iv) ensure that the account is send to the correct person/company and address.
- (e) A written affidavit shall be obtained by the Directorate: FSQA of DAFF from the producer or exporter which shall indicate that he/she will be fully responsible for all costs involved in the dispatching and analysis of the sample and that he/she indemnifies the Department of Agriculture, Forestry and Fisheries and Directorate: FSQA of any costs in this respect. (See Annexure C as an example of an affidavit).

## 15. **HANDLING OF COMPLAINTS FROM IMPORTING COUNTRIES (NON-CONFORMITIES)**

The Directorate: FSQA, D: AIC, appointed assignee and the laboratories will be copied on the Non-conformities.

### 15.1 **General**

- (a) The D: FSQA of DAFF will acknowledge to the Notifying country, in writing within two working days, receipt of non-conformity with regard to the exceeding of an MRL, or the use of unregistered agro-chemicals.
- (b) The D: FSQA, D: IS, D: AIC of DAFF and the assignee will evaluate the information received and conduct an investigation within a month of receipt of the non-conformity.
- (c) The relevant exporter/packhouse/producer and producer association, where applicable, will be notified by the D: FSQA of DAFF within five working days of receipt of non-conformity.

- (d) Should the information mentioned in paragraph (b) not be sufficient, additional information must be requested in writing from one or more of the following role players involved:
- (i) Importing country.
  - (ii) Exporter.
  - (iii) Packhouse.
  - (iv) Producer.
  - (v) Laboratories

#### 15.2 Information from the importing country

- (a) Where sampling and analytical methods used by the importing country are in doubt, such methods shall be requested by the D: FSQA of DAFF from the relevant authorities via the appropriate channels (Embassy) where necessary and must at least include --
- (i) the method of sampling;
  - (ii) the sample size;
  - (iii) the manner in which the sample(s) was/were handled and treated throughout the process; and
  - (iv) the analytical test procedure.
- (b) Detailed records of the analysis results will be requested where necessary for interpretation by laboratories.
- (c) Information must be obtained in the shortest possible time.

#### 15.3 Information from exporters, packhouses and producers

- (a) The relevant exporter must, where possible, obtain and forward digital photos of all four sides of one carton in the consignment concerned to the D: FSQA of DAFF within three working days of receiving a request in this regard.

- (b) The relevant exporter/packhouse/producer must provide the following information on request:
  - (i) Spray programs, including names of agro-chemicals sprayed, dosages, date of application, withholding periods and actual harvest dates. (Possibility of drift).
  - (ii) Phytotoxicity detected on trees or plants.
  - (iii) Analytical results of private quality control samples with regard to the chemical/produce in question and the laboratory(ies) involved.
  - (iv) An explanation why the MRL was exceeded or a specific agro-chemical was used or any additional info that might be useful to the investigation.
- (c) The requested information must reach the D: FSQA of DAFF within three working days.

#### 15.4 Information from the laboratories

- (a) The D: FSQA of DAFF will request, when necessary, statistics from the laboratories regarding the chemical/produce in question.
- (b) Information must be provided within three working days.

#### 15.5 Actions to be taken by the Directorate: Food Safety and Quality Assurance of the Department of Agriculture, Forestry and Fisheries

The D: FSQA of DAFF will, in conclusion –

- (a) evaluate all information received/gathered (in collaboration with the Directorate: Agricultural Inputs Control of the Department of Agriculture, Forestry and Fisheries if necessary) and decide on a course of action;

- (b) conduct risk communication either via press or only to the relevant industry association or exporter/packhouse/producer in instances where no organized industry association exists; and
- (c) provide feedback to the relevant authorities in the importing country of actions taken and/or the outcome of the investigation.

## **16. ANNEXURES**

The following Annexures are attached:

- (a) Annexure A - Example of an inventory list.
- (b) Annexure B - Example of sticker that must be attached to the outside of each sample bag.
- (c) Annexure C - Affidavit to be completed in case of appeals.
- (d) Annexure D – List of Laboratories
- (e) Annexure E - Contact person(s) from PPECB and DAFF.

## **17. CONTRACT REVIEW**

The SOP will be reviewed annually or when the legislation necessitates it.

## **18. RECORDS**

All records as stated in this SOP shall be kept for a period of two years and in accordance of DAFF archive procedure.

**ANNEXURE A  
EXAMPLE OF AN INVENTORY LIST**

Area of Origin	Sample Number	Product	Cultivar	Consignment Number	Exporter Code	Inspection Point	Date of Inspection	Producer & PUC	Analysis Required
	INVENTORY 47-35								
47-35	4702G5126NWGA003	GROUNDNUTS		2BEEC167S534H5	NWG	5126	4-Sep-02		PESTICIDES
47-35	4702G5126NWGA002	GROUNDNUTS		2BEEC178S531H5	NWG	5126	4-Sep-02		PESTICIDES
47-35	4702GSWH5134R07	GROUNDNUTS		BHVK 255	SWH	5134	4-Sep-02		PESTICIDES

Total Samples forwarded on this dispatch 0

E-mail this to Mr Pieter Broere on pieterb@nda.agric.za each time batches of samples are forwarded to the laboratory.



## ANNEXURE B

### EXAMPLE OF STICKER WHICH MUST BE ATTACHED TO THE OUTSIDE OF EACH PLASTIC BAG

Sent by: \_\_\_\_\_ Area (code) \_\_\_\_\_ Exporter code: \_\_\_\_\_ Insp. Point \_\_\_\_\_  
 Product: \_\_\_\_\_ Cultivar: \_\_\_\_\_ Sample number \_\_\_\_\_  
 PUC/FBO \_\_\_\_\_ Producer \_\_\_\_\_ Insp. Date \_\_\_\_\_  
 Sampler's name: \_\_\_\_\_ Consignm. No.: \_\_\_\_\_ Remarks \_\_\_\_\_  
 Analysis required: pesticide residues [ ] aflatoxin [ ] SO<sub>2</sub> [ ] % moisture [ ] other \_\_\_\_\_

---

#### Explanatory Notes:

1. *Sent by* - Refers to the organisation sending the samples, e.g. PPECB, IS.
2. *Area* - Refers to the regional office that the sampling point falls under.
3. *Exporter code* - Refers to the three letter codes used internally by PPECB to identify their exporters.
4. *Insp point* - Refers to the place where the sample was drawn. For PPECB a four-letter code is used. For all other samples the name of the town/city is used.
5. *Product* - Refers to the type of product sent, e.g. apples, grapes, raisins, etc. (not to be used to indicate the cultivar name).
6. *Cultivar* - Refers to the name of the specific cultivar of a product.
7. *Sample number* - Refers to a unique and individual number allocated to each sample. (PPECB would for example use a barcode).
8. *PUC/FBO* - Refers to the code registered by the producer or packhouse with the Executive Officer. Where no PUC/FBO code has been registered, this space may be left open and only the farm or packhouse name need to be indicated next to the space for "Producer".
9. *Producer* - Refers to the farm or packhouse name.
10. *Insp. Date* - Refers to the date the sample was drawn at the inspection point.
11. *Sampler's name* - Refers to the name of the person who drew the sample.
12. *Consignm. No.:* - Refers to the consignment note number.
13. *Remarks* - This space allows for any additional information that the lab must be made aware of, e.g. whether the sample is urgent.
14. *Analysis req* - Refers to the type of analysis that the lab needs to perform on the sample. The correct option must be ticked. "Other" is only for analysis pre-arranged with the laboratory.

**ANNEXURE C****AFFIDAVIT TO BE COMPLETED IN CASE OF APPEALS**

Appeal (1) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I, (2) \_\_\_\_\_

Id No. \_\_\_\_\_ hereby declare that:

- (a) I am aware that the analysis of the samples by the (3) \_\_\_\_\_  
 \_\_\_\_\_ laboratory is part of my  
 obligation to discharge myself of my onus of proof in this appeal;
- (b) I undertake to bear all costs incidental to and connected with such analysis; and
- (c) I indemnify the Department of Agriculture and the Directorate: Food Safety and Quality Assurance, their employees and appointed assignees of any costs in this respect.

\_\_\_\_\_  
**SIGNATURE OF APPELLANT**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**WITNESS**

\_\_\_\_\_  
**DATE**

**EXPLANATORY NOTES:**

- (1) Complete description of appeal  
 (2) Full names of appellant  
 (3) Name of approved laboratory

**ANNEXURE D****LIST OF LABORATORIES****NATIONAL REFERENCE LABORATORIES**

<b>Name of the Laboratory</b>	<b>Accreditation status</b>	<b>Testing for</b>
National Analytical Service Laboratory Stellenbosch (Quarantine Station, Polkadraai Road)	ISO 17025 accredited	Pesticides Analysis
National Analytical Service Laboratory Pretoria (Agriculture Place, 20 Beatrix Street, Arcadia)	Working on accreditation	Pesticides Analysis

**OFFICIALLY RECOGNISED LABORATORIES**

<b>Name of the Laboratory</b>	<b>Accreditation status</b>	<b>Testing for</b>
Hearshaw and Kinnes 9 Regent Park, Bell Crescent, Cape Town, 7945	ISO 17025 accredited	Pesticides Analysis
Microchem 1st Floor Fairweather House, 176 Sir Lowry Road, Woodstock, Cape Town, 8001	ISO 17025 accredited	Pesticides, Heavy Metals and Microbiological Contaminants Analysis
Hortec Unit D45, Olive Grove Industrial Estate Old Paardevlei Rd Somerset West 7130	ISO 17025 accredited	Pesticides Analysis
PPECB Laboratory Centurion Close 119 Gerhard Street Centurion 0157	ISO 17025 accredited	Pesticides Analysis
KL Analytical Services CC T/A <b>Labserve</b> Unit 8,9, Nebo Park, Suikerriet Street, Nelspruit (Physical) PO Box 1920, Nelspruit, 1200 (Postal)	ISO 17025 accredited	Pesticide Analysis

## ANNEXURE E

### CONTACT PERSON(S) FROM THE DAFF AND PPECB

#### CONTACT PERSONS FROM THE DAFF:

##### Laboratory related enquiries:

Mr. Albert Smith Tel.: (012) 809 1718

##### All other enquiries:

Billy Makhafola – (Executive Officer – Agricultural Products Standards)  
Tel: (012) 319 - 7306

Mbulaheni Thomas Mutengwe - (Acting Division Manager - Fresh Fruit and flowers)  
Tel.: (012) 319-6121

Theo van Rensburg (Division Manager: Animal and Processed Products)  
Tel.: (012) 319-6020

Caroline Makobe (Acting Division Manager: Agronomy and Vegetables)  
Tel.: (012) 319-6291

#### CONTACT PERSONS FROM PPECB

##### All enquiries:

Shubesco Heilbron (Programme Manager: Food Safety)  
Tel.: (021) 930-1134

Natasha Wentzel (Standards Co-ordinator)  
Tel.: (021) 930 1134

#### AMENDMENT RECORD

Amendment No.	Entered by:	Date:
1	Hanlie Wessels/Estelle Visser	2007
2	Billy Makhafola/TM Chipane/MT Mutengwe	2014
3	Billy Makhafola/TM Tshipana	2015
4.	Billy Makhafola/MT Mutengwe	2018

#### DISTRIBUTION

Copies of this Standard Operating Procedure will be distributed to all interested parties by the Secretariat upon request. Alternatively it will also be available on the DAFF's intranet and on the Web Page: [www.daff.gov.za](http://www.daff.gov.za).

Approved by:

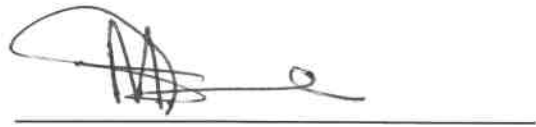
A handwritten signature in black ink, consisting of a large, circular, scribbled initial followed by several vertical strokes, all written over a horizontal line.

Executive Officer: Agricultural Product Standards

Document Owner

Date: 30/10/18

Co-approved by:

A handwritten signature in black ink, featuring a large, stylized initial followed by a few horizontal strokes, all written over a horizontal line.

Acting Manager: Fresh Fruits and Flowers

Co-document owner

Date: 30/10/2018