

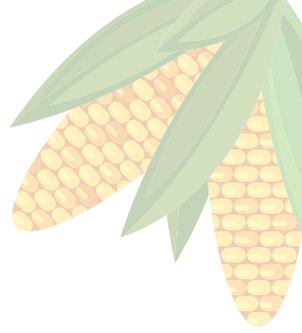


# Guidelines on retail food safety audits' for producers



agriculture,  
forestry & fisheries

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA



## **Guidelines on retail food safety audits' for producers**

October 2012

Directorate Marketing

**DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES**

# Contents

<b>i</b>	<b>Definition of terms</b> .....	<b>iv</b>
<b>ii</b>	<b>Acronyms</b> .....	<b>vi</b>
<b>1.</b>	<b>Why this guide?</b> .....	<b>1</b>
<b>2.</b>	<b>Objectives</b> .....	<b>1</b>
<b>3.</b>	<b>Types of audits</b> .....	<b>1</b>
<b>4.</b>	<b>GLOBALGAP</b> .....	<b>1</b>
<b>5.</b>	<b>Regulation standards, legislations and guidelines</b> .....	<b>3</b>
<b>6.</b>	<b>Audit procedure</b> .....	<b>4</b>
<b>7.</b>	<b>List of minimum requirements for audit reports</b> .....	<b>6</b>
<b>8.</b>	<b>Guiding principles on compliance criteria (GMP auditor guidance notes)</b> .....	<b>7</b>
	8.1 Good manufacturing practice (GMP) and Hazard Analysis Critical Control Point (HACCP) .....	<b>7</b>
	8.2 General manufacturing practices (GMP) Audit .....	<b>8</b>
<b>9.</b>	<b>Main benefits and challenges</b> .....	<b>14</b>
<b>10.</b>	<b>GLOBALGAP approved certification bodies (fruit and vegetables)</b> .....	<b>15</b>

2012

Printed and published by

Department of Agriculture, Forestry and Fisheries

Design and layout by

Directorate Communication Services

Private Bag X144, Pretoria 0001

## DEFINITION OF TERMS

<b>Accreditation:</b>	A process by which an authoritative body gives formal recognition of the competence of a certification body to provide certification services against an international standard.
<b>Accreditation body:</b>	An agency having jurisdiction to formally recognise the competence of a certification body to provide certification services.
<b>Audit:</b>	A systematic and functionally independent examination to determine whether activities and related results comply with a conforming scheme, whereby all the elements of this scheme should be covered by reviewing the supplier's manual and related procedures, together with an evaluation of the production facilities.
<b>Auditor:</b>	A person qualified to carry out audits for or on behalf of a certification body.
<b>Certification:</b>	A process by which accredited certification bodies, based on an audit, provide written assurance that food safety requirements and management systems and their implementation conform to requirements.
<b>Certification institution:</b>	A provider of certification services, accredited to do so by an accreditation body.
<b>Certification decision:</b>	The granting, continuing, expanding the scope of, reducing the scope of, suspending, restoring, withdrawing or refusing of certification by a Certification Body.
<b>Coliform:</b>	Bacteria that are commonly used as bacterial indicator of sanitary quality of foods and water. They are defined as rod-shaped gram-negative non-spore forming bacteria which can ferment lactose with the production of acid and gas when incubated at 35 to 37 °C. Coliforms can be found in the aquatic environment, in soil and on vegetation; they are universally present in large numbers in the faeces of warm-blooded animals. While coliforms are themselves not normally causes of serious illness, they are easy to culture and their presence is used to indicate that other pathogenic organisms of faecal origin may be present. Faecal pathogens include bacteria, viruses, or protozoa and many multicellular parasites.
<b>Complaint:</b>	A legal document that is an expression of displeasure or dissatisfaction, but is not an appeal.
<b>E. coli:</b>	It is a gram-negative, rod-shaped bacterium that is commonly found in the lower intestine of warm-blooded organisms (endotherms). Most E. coli strains are harmless, but some serotypes can cause serious food poisoning in humans, and are occasionally responsible for product recalls because of food contamination. The harmless strains are part of the normal flora of the gut, and can benefit their hosts by producing vitamin K2, and by preventing the establishment of pathogenic bacteria within the intestine.
<b>Food safety programme:</b>	A systematic plan which has been developed, implemented and maintained for the scope of food safety. This shall consist of a standard and food safety system in relation to specified processes or a food safety service to which the same particular plan applies. The food safety scheme should contain at least a standard, a clearly defined scope and a food safety system.
<b>HACCP:</b>	A system which identifies, evaluates, controls and monitors hazards relating to food safety and specified by the Codex Alimentarius or the National Advisory Committee on Microbiological Criteria for Foods.
<b>Hazard:</b>	A biological, chemical, physical or any other property that may cause a product to be unsafe for consumption.
<b>Inspection:</b>	Examination of systems for control of food safety, in order to verify that they conform to requirements.

<b>Internal audit:</b>	Audit carried out by the producer group on its own Quality Management System, at least once a year.
<b>Packhouse:</b>	Any facility set up for handling harvested produce (see Produce handling). Only those packhouses that do not pack the GLOBALGAP registered produce in the final package and/or do not process the produce by changing its shape or appearance are included in the GLOBALGAP certificate scope for Integrated Farm Assurance.
<b>Potable water:</b>	Water which meets the quality standards of drinking water such as those described in the WHO published Guidelines for the Safe Use of Wastewater and Excreta in Agriculture and Aquaculture.
<b>Processed product:</b>	When the structure of the product is altered in appearance or form.
<b>Product recall:</b>	The removal by a supplier of product from the supply chain that has been regarded to be unsafe and has been sold to the end consumer, or is with retailers or caterers and is available for sale.
<b>Post-harvest chemicals:</b>	Includes post-harvest Plant Protection Products, including wax, detergents and lubricants where applicable.
<b>Record:</b>	A record is a document that contains objective evidence, which shows how well activities are being performed or what kind of results, is being achieved.
<b>SANS 17025:</b>	This standard specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, non-standard methods, and laboratory-developed methods. It is applicable to all organisations performing tests and/or calibrations. These include, for example, first, second and third-party laboratories, and laboratories where testing and/or calibration form(s) part of inspection and product certification. This standard is applicable to all laboratories regardless of the number of personnel or the extent of the scope of testing and/or calibration activities.
<b>Supplier:</b>	An organisation supplying food or feed.
<b>Toilet:</b>	Facility where the persons may defecate and urinate in a hygienic manner (including waste disposal) and poses no food safety contamination risk to surrounding field area while ensuring the privacy of the person.
<b>Traceability:</b>	The ability to retrace the history, use or location of a product (that is the origin of materials and parts, the history of processes applied to the product, or the distribution and placement of the product after delivery) by the means of recorded identification".
<b>Vehicle:</b>	Any device used for the conveyance of raw material, ingredients, food, feed or packaging that is capable of being moved upon roadways, railways, waterways or airways. Vehicles can be motorised or non-motorised.
<b>Verification:</b>	A confirmation, through the review of objective evidence that requirements have been fulfilled.

## ACRONYMS

CCPs	Critical Control Points
CFA	Chilled Foods Association
DAFF	Department of Agriculture, Forestry and Fisheries
DoH	Department of Health
FIFO	First-in-first-out
GAP	Good agricultural practices
GDP	Good distribution practices
GFSI	Global Food Safety Initiative
GMP	Good manufacturing practices
HACCP	Hazard Analysis Critical Control Point
ISO	International Standard Organisation
MSDS	Material Safety Data Sheet
PRP	Prerequisite programmes
PPECB	Perishable Products Export Control Board
QMS	Quality Management System
SABS	South African Bureau of Standards
SANS	South African National Standard
SOP	Standard operating procedure
TQMS	Total Quality and Food Safety Management System
WHO	World Health Organization

### DISCLAIMER

This document has been compiled by the Department of Agriculture, Forestry and Fisheries and every effort has been made to ensure the accuracy and thoroughness of the information contained herein. The department cannot, however, be held responsible for any errors, omissions or inaccuracies in such information and data, whether inadvertent or otherwise. The Department of Agriculture, Forestry and Fisheries, therefore, accepts no liability that can be incurred resulting from the use of this information.

## 1. WHY THIS GUIDE?

Many smallholder producers feel that the requirements set by the formal agri-food markets (such as retailers, agro-processors, exporters, etc.) for agricultural products are very complex and that the opportunities and requirements associated with those programmes are not always clear. In addition, smallholder producers do not always know the requirements that are compulsory or voluntary.

After having read this manual, the reader should be able to understand the process followed by the formal agri-food markets in conducting food safety audits, their importance, the differences between them as well as their advantages and limitations. In order to be able to supply formal markets, the producers have to undergo certain audits based on the risk and type of product that they supply. Therefore, the reader will be able to find in this guide information regarding the food safety audits' prerequisites for producers. However, topics such as farming practices and post-harvest activities are beyond the scope of this guide.

## 2. OBJECTIVES

The main objective of the food safety audit is to:

- Ensure best practices regarding food safety standards;
- Identify the risks associated with a specific supplier and/or products and to mitigate the risks by ensuring that the suppliers implement adequate controls which are verified by the audit of their Food Safety Management System;
- Ensure consumer protection and strengthen consumer confidence;
- Brand protection (particularly for retailers, agro-processors and exporters);
- Continual improvement of industry standards; and
- Contacts where further information on food safety audit programmes can be found.

## 3. TYPES OF AUDITS

The audit system covers a number of sectors. The following audits will be performed, depending on the type and risk of product:

- Certified GLOBALGAP audit—all suppliers who grow agricultural products including fruit, vegetables, nuts and mushrooms;
- Fresh produce facility audit—all suppliers who prepack or process fruit or vegetable products of a low-risk nature (not washed or processed in any way that renders product ready to consume);
- Abattoir audit—all suppliers of raw meat products (prime cuts) other than poultry;
- Poultry abattoir audit—all suppliers of raw poultry products, not processed;
- Processing audit—all suppliers of processed products of a low to medium-risk nature;
- High risk audit—all suppliers of processed products of a high-risk nature, including washed and ready to eat fruit and vegetable products; and
- Distribution audit—all suppliers, including staging facilities, warehouses or distribution depots, who store and distribute products without any further packing or processing.

## 4. GLOBALGAP

GLOBALGAP (formerly known as EurepGAP) is a private sector body that sets voluntary certification standards and procedures for good agricultural practices. It was originally created by a group of European supermarket chains. GLOBALGAP aims to increase consumers' confidence in food safety by developing good agricultural practices which must be adopted by producers. The focus of GLOBALGAP is on food safety and traceability, although it also includes some requirements on



worker safety, health and welfare, and conservation of the environment. GLOBALGAP is a prefarm-gate standard, which means that the certificate covers the process of the certified product from before the seed is planted until it leaves the farm. It should be borne in mind that GLOBALGAP is a purely private standard.

In the light of the fact that all export farmers are to be GLOBALGAP certified and the fact that it covers most major food safety aspects at farming level, all major local retailers have adopted this standard as verification tool for all their fresh produce growers.

GLOBALGAP comprises three main sections under which the farm is evaluated on various aspects relating to daily farm operations and food safety:

### **All farm based**

This section covers all aspects relating to record keeping, site history, worker health and safety, waste and pollution management, environmental and conservation aspects (e.g. soil erosion management) and traceability.

### **Crops based**

This section covers everything involving the actual growing of the product – propagation material (substrate, seedlings etc.), fertiliser management and selection, soil management in terms of nutrients, irrigation (also water management), integrated pest management (what pesticides are sprayed and when).

### **Fruit and vegetable based**

This section covers certain specific points covered in general in the section above, but then also goes into further detail on harvesting practices and post-harvest processes, such as cooling, washing (where applicable) prepacking, storage, etc. This is a new section in the GLOBALGAP standard and repeats quite a couple of points being checked under most of the retailers' packhouse audit.

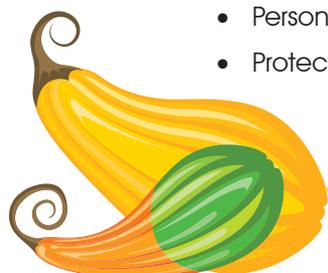
The most important fact about GLOBALGAP is that it is a system that basically ensures that farmers follow good agricultural farming practices. It is a management tool that ensures that farmers are effective in managing their routine farming tasks in such a way that an auditable history is built up. The most important food safety aspects covered by GLOBALGAP is the use of safe irrigation water, suitable soil not contaminated by heavy metals and responsible use of plant protection products that will not have a detrimental effect on the health of the consumer of the product. For further information, refer to [www.globalgap.org](http://www.globalgap.org). Checklists and guidelines for GLOBALGAP: GLOBALGAP Standards and Guidance documents.

The other audit required for local retailers' suppliers is to undergo various facility audits. Based on the microbiological risk of the product that is being packed (e.g. if it is intended to be ready to eat when it leaves the facility and is regarded to support the growth of pathogens, then it is a high-risk product. If it is intended for further processing or a product regarded as not supporting the growth of microorganisms up to the point of consumption, then it is a low-risk product). The supplier will have to indicate his/her product and the type of audit will be determined based on this aspect.

These audits, as in the GLOBALGAP, cover good practices in the processing environment, known as good manufacturing practices (GMPs) or otherwise known as Prerequisite Programmes (PRPs). Furthermore, these audits are also important food safety and quality aspects that all together make up a total quality and food safety management system (TQMS).

Areas covered in the facility audits (the detail varies between the low-risk and the high-risk audit) include the following:

- Policies, procedures and records – communication and implementation;
- Personnel hygiene;
- Protective clothing;



- Facility and local environment;
- Pest control;
- Equipment;
- Facility layout and production control;
- Receiving, stock rotation and food storage;
- Housekeeping, cleaning and sanitation;
- Process control;
- Laboratory and product analysis;
- Dispatch and transport.

All these points relate to processes important for ensuring consistency in the quality of the product being supplied to the retailers and more important to ensure that all products supplied to the retailers are safe for human consumption without causing injury, illness or death to any consumer.

## 5. REGULATION STANDARDS, LEGISLATIONS AND GUIDELINES

Retailers' food safety standards are based on various local industry standards, legislation and applicable industry guidelines.

**Table 1: Regulatory standards, legislation and guidelines**

Institution	Regulation standards	Legislation	Contact details
SABS	Food hygiene management standard	SANS 100049	Tel: (012) 428-6666 Fax: (012) 428-6928 E-mail: info@sabs.co.za
DoH	Regulations governing general hygiene requirements for food premises and the transport of food.	R918	<a href="http://www.doh.gov.za/list.php?type=Regulations&amp;year=1999">http://www.doh.gov.za/list.php?type=Regulations&amp;year=1999</a>
DoH	Regulations regarding processed foodstuffs	R723	<a href="http://www.doh.gov.za/list.php?type=Regulations&amp;year=2001">http://www.doh.gov.za/list.php?type=Regulations&amp;year=2001</a>
SABS	Drinking water	SANS 241	Tel: (012) 428-6666 Fax: (012) 428-6928 E-mail: info@sabs.co.za
SABS	Guidelines on the application of ISO 9000:2001 for the food and liquor industry	SANS 15161	Tel: (012) 428-6666 Fax: (012) 428-6928 E-mail: info@sabs.co.za
SABS	Handling of chilled and frozen foods	SANS 10156	Tel: (012) 428-6666 Fax: (012) 428-6928 E-mail: info@sabs.co.za
DoH	Foodstuffs, Cosmetics and Disinfectants Act, covering product labelling, ingredient declaration, the use of additives, etc.	Act No. 54 of 1972	<a href="http://www.doh.gov.za/docs/legislation/acts/2011/act54a.pdf">http://www.doh.gov.za/docs/legislation/acts/2011/act54a.pdf</a>
DAFF	Agricultural Product Standards Act	Act No. 119 of 1990	<a href="http://www.nda.agric.za/doaDev/sideMenu/foodSafety/doc/pears/PearsPart1_2_2011_.pdf">http://www.nda.agric.za/doaDev/sideMenu/foodSafety/doc/pears/PearsPart1_2_2011_.pdf</a>
GFSI	GFSI Guidance Document	Belgian Law	<a href="http://www.fao.org/prods/gap/database/gap/files/1217_GLOBAL_FOOD_SAFETY_INITIATIVE.PDF">http://www.fao.org/prods/gap/database/gap/files/1217_GLOBAL_FOOD_SAFETY_INITIATIVE.PDF</a>
CFA	High-risk Area – Best Practices Guidelines		<a href="http://www.chilledfoods.org">www.chilledfoods.org</a>



## 6. AUDIT PROCEDURE

The following is the procedure that is followed in conducting an audit

**Table 2: Audit procedure**

Procedure	Activities/Processes	Responsible party
AUDIT BOOKING	The supplier is required to contact the relevant auditing company to arrange a date for the audit.	Supplier
	The supplier needs to contact the auditing company at least 12 weeks prior to the required audit date.	
AUDIT CONFIRMATION	The auditing company will forward the following documents to the supplier: a pre-audit questionnaire; retailers' guidelines; retailers' audit checklist; standard quotation indicating costs.	Auditing company
	The supplier must send through confirmation to the auditing company with the relevant documentation as per the pre-audit questionnaire.	Supplier
	The auditing company will notify the relevant technologist and/or technical manager if the above has not been adhered to.	Auditing company
	An audit date will be confirmed between both parties.	Supplier and auditing company
	Failure to confirm the audit timeously will result in the supplier losing the day that has been allocated to them by the auditing company.	Supplier
AUDIT POSTPONEMENT/ CANCELLATION	Should a supplier wish to postpone or cancel an audit such a request shall be submitted in writing to the relevant Technical Manager for approval at least one month before the audit.	Supplier
	The application form will be given to the supplier by the auditing company.	Auditing company
	If the audit has been confirmed or the postponement is requested without the required 30 day notice period, cancellation costs may be incurred.	Supplier
GENERAL OUTLINE OF AUDIT PROCEDURE	The following procedure is followed during the audit: Opening meeting with all parties concerned where the auditor outlines the objective of the audit and the audit process. Conducting the audit via interviews, observation of activities and review of documentation. Identifying and recording the non-conformances. Concluding the audit. Conducting the closing meeting. For corporate suppliers a technologist may be present at the audit, as an observer, with the permission of the auditor and the supplier. Consultants may not actively participate in the audit. They can be present for the closing meeting.	Auditor



Procedure	Activities/Processes	Responsible party
AUDIT RESULT	The audit report is compiled within 7 working days of the audit.	Auditing company
	The audit results are only published to the supplier and the retailer, once the auditing company has received payment for the audit.	
	The retailer must receive the audit report within 30 days from the date of audit.	
	If the audit report has not been published as a result of non-payment, the Technical Manager shall send the supplier a letter requesting him to make payment. Failure to do so could result in suspension of the supplier.	
NON-CONFORMANCES	During the audit, the auditor will identify the non-conformances. Upon receiving the audit report, the supplier is to complete the Corrective Action Report and forward it to the relevant technologist.	Supplier
	With the GLOBALGAP audit, the supplier has 28 days to rectify certain non-conformances. The required corrective action needs to be sent to the auditor and a copy should be sent to the technologist. Thereafter the results will be available for publication.	Technologist
AUDIT VALIDITY	The audit is valid for a maximum period as determined by the audit rating achieved from the previous audit.	Technologist
	The audit will be valid for:  The products that have been audited and the facility that has been nominated to supply; The process that has been audited.	Supplier
	A re-audit will be conducted in the event of the following: Corrective action emanating from a previous audit. A change of ownership; Relocation of facility or major structural alterations to the facility; Change of products that are being supplied; Change of process; and Increase in customer complaints.	National Technical Manager
AUDIT FOLLOW-UP	The supplier is responsible for following up on the non-conformances identified from the audit report.	Supplier
	The date of the next audit appears on the front page of the audit report and is determined by the audit score and rating.	
	The supplier is to ensure that the follow-up audit is scheduled.	



Procedure	Activities/Processes	Responsible party
UNANNOUNCED AUDITS	The retailer/agro-processor reserves the rights to request that a supplier undergoes an unannounced audit in the following instances:  A drop in audit score of 10% or more; A drop in audit rating; An increase in customer complaints; As a result of non-conformances highlighted by the technologist in the supplier visit report ; If it is evident that the Food Safety Management system is not consistently adhered to on a daily basis (window-dressing on day of audit or visit by technologist).	Technical Manager and Technologist
	A letter will be sent to the supplier informing him that an unannounced audit has been requested.	Technical Manager and Technologist
	The supplier needs to complete section 2 of the letter and return this to the Technical Manager, acknowledging receipt of the letter and agreeing to the conditions therein.	Supplier
	The Technical Manager is to notify auditing company and request that they schedule the unannounced audit accordingly.	Technical Manager

## 7. LIST OF MINIMUM REQUIREMENTS FOR AUDIT REPORTS

An audit report shall contain the following as a minimum.

### 7.1 General information

- Name of the company;
- Address;
- Name of certification body;
- Address;
- Name of factory;
- Address;
- Accreditation details;
- Date(s) of assessment;
- Date of previous assessment;
- Name of the food safety standard;
- Scope of assessment (detailed description processes/products);
- Product category/product rating;
- List of key personnel present at assessment;
- Name/signature company;
- Name/signature assessor.

### 7.2 Summary of results

- Description HACCP/QMS system;
- Description of existing certificates/approvals company;
- Overview of assessed processes;



- Conclusion of the assessment; and
- Expiry date of certificate.

### 7.3 List of non-conformances

- Closed;
- Outstanding;
- New.

### 7.4 Detailed assessment report/sampled items

- HACCP requirements – results per key element;
- QMS requirements – results per key element;
- GMP/GAP/GDP requirements – results per key element.

## 8. GUIDING PRINCIPLES ON COMPLIANCE CRITERIA (GMP AUDITOR GUIDANCE NOTES)

### 8.1 Good manufacturing practice (GMP) and Hazard Analysis Critical Control Point (HACCP)

GMP is a collection of generally recognised procedures and practices that together provide a code stating what is acceptable and what is not acceptable in the food industry. GMP enables the production of safe and wholesome food through well-controlled operations that avoid waste and any type of contamination.

While GMP sets the overall background to the factory site and facilities for hygienic food production, issues of food safety are more clearly defined under the principles and practices of an HACCP plan.

HACCP is an analytical science-based tool that has revolutionised food safety. It is an approach that can be modified and be adapted to virtually any food industry to increase assurance that a product is safe from harmful contaminants, whether these are biological, chemical or physical. HACCP provides a plan for the prevention, control and mitigation of problems and the benefits of preventing illness and death outweigh the costs of implementing and maintaining the HACCP systems.

**Table 3: Summary components of GMP and HACCP**

Elements of GMP	Principles of HACCP (quality assurance)
The best manufacturing environment and practices for the production of the desired products.	Evaluating risks in a food production process. The system is built around seven basic principles summarised below.
Hygienic design of buildings and the working environment.	Conduct hazard analysis: to identify biological, chemical or physical hazards associated with raw materials or the process.
Food handling equipment and design of the process. Processing conditions for the products being processed.	Identify Critical Control Points (CCPs): i.e. steps that must be taken within the process to destroy food pathogens, or remove identified physical or chemical hazards.
Pest prevention and control around the production site and within the buildings.	Establish critical limits for removing the hazard, e.g. times and temperatures for processing.
Protecting the staff – health and safety in a food production environment.	Establish monitoring procedures e.g. for measuring times of processing.



Elements of GMP	Principles of HACCP (quality assurance)
Protecting the product and the consumer – Personnel hygiene, Cleaning procedures, HACCP. Staff members understand their responsibilities for maintaining product safety at all stages from raw material intake to consumption.	Establish corrective action if a critical limit has been exceeded, e.g. staff members have authority to stop the process.
Storage, packaging and transportation to ensure that the product reaches the distributor in ideal condition.	Establish record keeping procedures that document the processing conditions for every batch.
Quality management, including records, traceability, testing and inspection.	Establish verification procedures to confirm that the HACCP system is working, e.g. by checking the accuracy of the processing instrumentation.

## 8.2 General manufacturing practices (GMP) Audit

The format of the GMP Audit follows the seven elements outlined in Table 3 above. These have been developed into a detailed checklist for auditing factory compliance to GMP. The audit checklist should be used for the full physical inspection of the factory. The inspection should be conducted by senior management and be made with an open and critical mind. The compliance requirements may initially appear daunting, but any good food factory should be able to meet these requirements with only a few revisions. A good factory environment and planned production practices are the starting points for ensuring good food safety control through HACCP. The following constitutes guiding principles on compliance criteria (GMP auditor guidance notes).

### 8.2.1 General food safety policy and records

- There must be a visual and documentary evidence that procedures, instructions and relevant practices detailed within the hygiene risk assessment are being implemented during the product handling and packaging operations for the supplied products. In terms of the requirements, this is a minor must.
- There must be a designated person in charge of the facilities' food safety programmes, including verification of sanitation activities. The company's senior management shall ensure that there is a forum to identify and address any safety or legality issues at a strategic level. Minutes of this forum shall be documented. In terms of the requirements, this is a minor must.
- All employees should be informed and trained with regard to any updates and/or changes with regard to the Policy Manual. In terms of the requirements, this is a minor must.
- There must be multiple people responsible for the accomplishment of a food safety programme. Exception can be made in small facilities where the owner/manager only has a maximum of 3 staff members reporting to him/her. In terms of the requirements, this is recommended.
- Documentation of meetings indicating company commitment to good practices with details of areas that have been highlighted and addressed must be available. In terms of the requirements, this is a minor must.
- Signs supporting appropriate GMPs must be posted to remind workers of proper practices. Areas requiring the use of hairnets, gloves, smocks, etc. should be posted at entrances. Hand washing, no smoking, eating, drinking signs should also be properly placed in pack house. In terms of the requirements, this is a recommended.
- Producers must be able to trace back ingredients to their supplier should a recall investigation necessitate this information. In terms of the requirements, this is a major must.
- An effective documented product recall procedure shall be in place. The procedure shall be appropriate, formalised and be capable of being operated at any time and will take into account stock requisition, logistics, recovery, storage and disposal. The procedure shall be regularly reviewed, and if necessary, revised to ensure accuracy. There must be written procedures that include current contact list. In terms of the requirements, this is a minor must.



- These records must be kept on file to support company policy. The records must include product rejections and customer complaints. Responses and actions taken when complaints occur. Trends and analysis can be monitored. These records must be reviewed by management on a regular basis. In terms of the requirements, this is a minor must.
- This in-house inspection is designed to identify problems and/or situations which need improvement. Scheduling and follow-up inspections must verify task completion. Results of the internal audit shall be brought to the attention of the personnel responsible for the activity audited. Corrective actions and timescales for their implementation shall be agreed upon. In terms of the requirements, this is a minor must.
- Documentation of training is necessary to ensure all new employees are adequately trained in basic principles. An exception can be made in small facilities where the owner/manager only has a maximum of three staff members reporting to him/her. In terms of the requirements, this is a minor must.
- To document the compliance of employees to the company's food safety policies and to document any remedial action taken when employees are not compliant. In terms of the requirements, this is a minor must.

### 8.2.2 Personnel hygiene

- The companies' hygiene policy should be documented, and be made available to all staff and visitors and supported by the correct SOPs. Visitors must be made aware of personal hygiene standards. In terms of the requirements, this is a minor must.
- An adequate number of toilets are required for both male and female employees. Review local and state regulations for numbers, location and construction requirements. No "long drops" will be allowed at/in pack-houses. Toilets must not open directly onto the packing area. In terms of the requirements, this is a major must.
- Suitable and sufficient hand-washing facilities shall be provided at access to, and at other appropriate points within, production areas. Adequate washing with soap and water is obligatory before starting work and after each absence from the workstation. The hand-washing procedure must be understood and applied. In terms of the requirements, this is a major must.
- Monthly hand swabs should be performed randomly on all packhouse staff's hands to ensure procedures are being adhered to. Corrective action for out-of-spec results should be documented. In terms of the requirements, this is recommended.
- Employees with these afflictions must not work directly with produce or food contact surfaces because of potential contamination. Standard operating procedure (SOP) must be in place for reporting and inspection of these. In terms of the requirements, this is a major must.
- No jewellery should be allowed in the packhouse. An exception can be made only on wedding bands. In terms of the requirements, this is recommended.
- Eating, chewing gum, drinking beverages or smoking must be confined to areas other than where food or packaging material may be exposed or where equipment or utensils are washed. In terms of the requirements, this is a minor must.
- Smoking while wearing in pro-protective clothing should not occur. In terms of the requirements, this is a major must.
- A separate area must be available for employees to leave their personal items. In terms of the requirements, this is recommended.

### 8.2.3 Protective clothing

- Suitable company-issued protective clothing shall be worn by food handlers, visitors, and contractors working in or entering food-handling areas. Smocks and aprons must cover street clothes



that may have contaminants from the outside environment. Sleeves and gloves (if appropriate for use) can help prevent transmission of bacteria from the arms and hands. Hairnets must cover hair and ears. In terms of the requirements, this is a major must.

- A designated area must be available for employees to leave these items. In terms of the requirements, this is a minor must.
- Protective clothing must be hygienically laundered either under direct control of management or must be laundered through an in-house procedure or by an outside subcontractor. In terms of the requirements, this is a minor must.

#### 8.2.4 Facility and local environment

- Walls must be kept clean during the operational season and be cleaned thoroughly after a period of dormancy. No accumulation of dirt would be acceptable. In terms of the requirements, this is a minor must.
- Floors must clean easily, be intact, impervious to water and resist wear and corrosion. In terms of the requirements, this is a minor must.??Who approved this?
- Floors must have adequate falls to cope with the flow of any water or effluent towards suitable drainage. In terms of the requirements, this is a minor must.
- Where no ceilings have been installed the bottom side of the roofing material should be compliant to the requirements. In terms of the requirements, this is a minor must.
- Visual inspection methods must be employed and records kept to avoid contamination by foreign material. In terms of the requirements, this is a minor must.
- Lights must be periodically cleaned if exposed to food products or packaging materials. They must be covered by clear shields to prevent glass from falling into the product in case of breakage. For high temperature lights, where plastic covers are not viable, a fine mesh metal screen must be fitted. In terms of the requirements, this is a major must.
- Proper lighting is necessary for inspection (product and facility) and sanitation procedures to take place. In terms of the requirements, this is a minor must.
- Inadequate ventilation can result in product contamination. Adequate ventilation must be provided in product storage and processing environments. Where the process requires screened or filtered air, the equipment used for this purpose must be adequately maintained. Cooling units must be included in the cleaning schedule to prevent cross-contamination. In terms of the requirements, this is a minor must.
- Clean, well-maintained strip curtains are beneficial in reducing air contaminants and can be a barrier for flying insects. In terms of the requirements, this is recommended.
- Where windows are designed to be opened for ventilation purposes, they shall be adequately screened to prevent the ingress of insects. Glass policy must be implemented. In terms of the requirements, this is a minor must.
- Wood used for the mounting of equipment must be appropriately sealed and inspected on a regular basis. In terms of the requirements, this is a minor must.
- Pallets must be stored in such a manner to prevent cross-contamination and pest harbourage. In terms of the requirements, this is a minor must.
- The area outside the facility must be free of litter, waste, refuse, uncut weeds or grass and standing water to avoid attraction of, or breeding place for rodents, insects or other pests, as well as microorganisms that may cause contamination of product. In terms of the requirements, this is a minor must.



### 8.2.5 Pest control

- A pest control programme is fundamental in ensuring GMP. A pest control programme is essential to facilitate sanitation. It must be maintained by a certified pest control operator. All relevant documentation must be on file. In terms of the requirements, this is a major must.
- The location of all pest control measures should be identified on a plan/diagram of the site. This allows the inspector to check that traps are in their allocated positions, clean, intact, and monitored. In terms of the requirements, this is a minor must.
- All pest control devices must be cleaned regularly and must be intact. Evidence of contamination (by insects, rodents, and/or birds) constitutes automatic audit failure. Correctly sited, permanently operational electric fly killers should, where appropriate, be provided. Non-toxic monitoring blocks are allowed within the production area, these bait stations must be clearly marked. Material Safety Data Sheets (MSDS) must be available. In terms of the requirements, this is a major must.
- Service reports are necessary for the identification and correction of pest problem areas. In terms of the requirements, this is a minor must.
- The facility and the outside perimeter must be free of pest activity. Evidence of rodents and/or birds inside the packhouse and outside is an indication of a pest problem. In terms of the requirements, this is recommended.
- All exterior doors must fit tightly with a maximum allowable gap of 5 mm and be fitted with self-closing devices. Packhouse must comply with packhouse standards applicable for the specific crop. In terms of the requirements, this is recommended.
- Walls must be free of holes, crevices, and cracks to prevent pest infestations. In terms of the requirements, this is recommended.

### 8.2.6 Equipment

- Food equipment must not have flaking paint, rust, etc. These items can fall into the product. In terms of the requirements, this is a major must.
- Equipment must be made of appropriate materials that can be easily cleaned and maintained in an acceptable condition. In terms of the requirements, this is a minor must.
- All equipment should be properly specified before commission, and should be adequately maintained, serviced and operated to produce a safe and legal product. Aisles and working spaces that are provided must be of adequate width to permit the monitoring of pest activity and for employees to perform their cleaning duties. In terms of the requirements, this is a minor must.
- All cold rooms must have a thermometer to monitor and control the temperature. Ambient temperature must be at 25 °C and chilled maximum must be at 5 °C. In terms of the requirements, this is a minor must.
- Thermometers must not be of glass or mercury to avoid contamination in case of breakage. In terms of the requirements, this is a minor must.
- Records of calibration must be used to demonstrate the accuracy of equipment used. In terms of the requirements, this is a minor must.
- The maintenance shop should be clean and well ordered. An unclean shop can result in cross-contamination and pest attraction. In terms of the requirements, this is a minor must.
- There must be a preventative maintenance programme to prevent equipment failure that can result in physical or chemical contamination of products. In terms of the requirements, this is a minor must.



- A post-maintenance programme, cleaning schedule and log should assist in keeping track of the condition of equipment in order to prevent hazards from occurring. In terms of the requirements, this is a minor must.
- Cleaning of electric boxes must be included in the sanitation schedule. Trained personnel must be responsible for cleaning. In terms of the requirements, this is recommended.

#### 8.2.7 Facility layout and production control

- The packhouse should be completely enclosed to minimise pest entry into the facility and to avoid contamination of products. The packhouse must comply with packhouse standards applicable for the specific crop. In terms of the requirements, this is a major must.
- Storage practices must consider the protection of the product from external factors that can cause direct or indirect contamination. In terms of the requirements, this is a major must.
- There must be a designated entrance and exit areas for staff and visitors to improve hygiene controls and product flows in the packhouse. In terms of the requirements, this is a minor must.
- Reusable containers must be labelled visually or in the language understood by the workers to minimise contamination of product. In terms of the requirements, this is recommended.

#### 8.2.8 Receiving, stock rotation and food storage

- To avoid cross-contamination, and adulteration and possible spoilage between produce and unrelated items, the packing house must not be used for general storage. In terms of the requirements, this is a minor must.
- Packaging, ingredients and finished product must always be stored off the ground and must be kept covered to avoid contamination from dust, condensation, etc. In terms of the requirements, this is a minor must.
- Packaging should be stored away from raw materials and finished products. Packaging should be removed from outer packaging outside production areas to eliminate risks of contamination. In terms of the requirements, this is recommended.
- Proper rotation of product and packaging materials can prevent stock losses because of pest infestation, decomposition, mould and other problems associated with prolonged storage. FIFO policy must correspond to production date. In terms of the requirements, this is a minor must.
- Incoming goods must be inspected for pests, foreign materials such as rocks, stones, screws, etc. In terms of the requirements, this is a minor must.
- All packhouses have to maintain a supplier quality and food safety programme to ensure the safety of the raw materials they utilise in the final product. This should include a documented list of all suppliers and outgrowers, copies of relevant food safety certificates (GLOBALGAP, Tesco's Natures Choice, SA-Gap) and where these are not available, the supplier should do own periodic pesticide residue testing to verify safety of raw materials (required at a seasonal interval per crop). In terms of the requirements, this is a major must.

#### 8.2.9 Housekeeping, cleaning and sanitation

- Cleaning practices should be completed so as to minimise the risk of contamination. In terms of the requirements, this is a major must.
- Written cleaning schedule must be available, detailing what must be cleaned by whom and at what frequency. In terms of the requirements, this is a major must.
- All chemicals require a separate locked storage area. The area is to be located away from any food ingredients, raw and finished food products as well as packaging materials in order to prevent potential chemical contamination. In terms of the requirements, this is a major must.



- All cleaning chemicals must be SABS approved as shown on the label. Must also be stored separately from post-harvest chemicals, but under similar storage conditions. MSDS must be readily available. In terms of the requirements, this is a minor must.
- Food grade lubricants must be used to reduce the risk of chemical contamination. Dripping caused by overlubrication is a potential chemical contaminant to the product. In terms of the requirements, this is a minor must.
- All storage and surfaces areas must be kept clean to avoid pest attraction and contamination of products, ingredients or packaging. This includes plastic strip curtains. In terms of the requirements, this is a major must.
- Foods and packaging must be covered or removed from the area while cleaning is taking place to avoid contamination. In terms of the requirements, this is a minor must.
- Filters must be cleaned regularly to prevent any build-up of contaminants. In terms of the requirements, this is a minor must.
- The sanitation crew must wear safety equipment to avoid any health problems from the chemicals that they use during the cleaning process. In terms of the requirements, this is recommended.
- Sanitation equipment must be constructed of appropriate materials for the purpose that will not contaminate the product. Brushes used in production areas must be separated from those used in non-production areas in order to prevent cross-contamination from occurring. In terms of the requirements, this is recommended.
- Waste and garbage must be removed on a frequent basis to prevent cross-contamination from occurring. In terms of the requirements, this is recommended.
- Daily pre-operation inspection log must be kept to ensure that all sanitation activities are being performed according to predetermined schedule. In terms of the requirements, this is a major must.
- Suppliers are required to verify the effectiveness of their cleaning practices by taking surface swabs of equipment after cleaning and submitting to a SANS 17025 laboratory for analysis. Corrective action has to be documented for out-of-spec results. In terms of the requirements, this is recommended.
- Written procedures for handling and mixing cleaning chemicals must be available and known to those who handle it. An up-to-date log of chemicals in and out must be available. In terms of the requirements, this is a minor must.

#### 8.2.10 Process control

- Rejected or on-hold products must be kept separate and identified from other products to avoid accidental use or shipping. Areas designated for this type of product should be labelled. Make sure that the pallet or rejected product is properly marked. In terms of the requirements, this is a minor must.
- SOP detailing the handling and mixing of post-harvest chemicals and sanitisers (wash water, hand dips, etc.) must be available and known to those handling it to avoid chemical contamination and/or build up of resistance. Where necessary the pH of solutions must be checked. In terms of the requirements, this is a minor must.
- Correctly filled logs detailing date, time, responsible person, chemical used, concentration, pH, temperature, metal detector, etc., must be available. In terms of the requirements, this is a minor must.
- Rework product must be labelled properly to avoid mistaking it with other products. It must be handled in a way to prevent contamination from the environment or from other products. In terms of the requirements, this is a minor must.



- All products must be coded for the day of production/packing (sell-by date) for traceability purposes. In terms of the requirements, this is a minor must.
- Shelf-life trials shall be undertaken, using documented protocols. Daily retention samples must be stored at the recommended conditions (temp.) for a period after the lapsing of the “sell-by” date and inspected on a daily basis. In terms of the requirements, this is a major must.
- On-line, trained quality controllers must be on duty at all packing lines to ensure compliance to quality and food safety specifications. In terms of the requirements, this is a minor must.
- Temperature of refrigerated rooms must be checked at regular intervals and records must be kept of this. In terms of the requirements, this is recommended.
- Updated specifications as supplied by the retailer must be readily available to all who work with the final product. In terms of the requirements, this is a major must.

#### 8.2.11 Laboratory and product analysis

- All water supplies used for cleaning, or in connection with any operation in the manufacture of products shall, where appropriate, be potable, either being drawn from mains supply or suitably treated according to its source. Testing of water must be performed monthly to assure it meets the microbial requirements of potable water, even if the product is not being washed, it may pose a safety risk during hand washing. Results from the local municipality are acceptable. Unacceptable levels for E. coli and coliforms in potable water should be reacted upon. There should be documentary evidence that the laboratory used for microbiological water analysis is accredited to ISO 17025, or an equivalent recognised standard, by a competent national authority, for the complete range of bacteria analysed, or is in the process of accreditation. In terms of the requirements, this is a major must.

#### 8.2.12 Dispatch and transport

- Refrigerated transport shall be capable of maintaining product temperature within specification, under maximum load, while the product is stored in the vehicle. The temperature of vehicles must be checked and records must be kept. In terms of the requirements, this is a minor must.
- Internal transport vehicles must be cleaned and sanitised to avoid contamination. In terms of the requirements, this is recommended.
- These procedures should be integrated into the recall programme and all employees trained accordingly. In terms of the requirements, this is a minor must.
- Electric heists/forklifts must be used to reduce the risk of chemical contamination. In terms of the requirements, this is recommended.
- Logs and maintenance records and schedules for delivery trucks must be available. In terms of the requirements, this is recommended.

### 9. MAIN BENEFITS AND CHALLENGES

The benefits of these processes are numerous. They include, among others, food quality and safety improvement, facilitation of market access and reduction in non-compliance risks regarding permitted pesticides, MRLs and other contamination hazards.

Application of GMP and HACCP should result in improved performance, often cost saving and greater profitability, reduced down time, fewer complaints, reduced cases of food poisoning, better use of processing equipment, improved staff morale and responsibility for the product.

The main challenges relating to implementation include an increase in production costs for the producers, especially record keeping, residue testing and certification, and inadequate access to information and support services.



The process requires a sufficient administrative and financial capacity, especially for smallholder producers. Consequently it is easier for large-scale producers to meet the requirements.

There is no special price premium or product label associated with GMP and HACCP, as it is a minimum standard focused on business-to-business relations.

## 10. GLOBALGAP APPROVED CERTIFICATION BODIES (FRUIT AND VEGETABLES)

### The following are the GLOBALGAP approved certification bodies

Perishable Products Export Control Board (PPECB)  
45 Silwerboom Avenue  
7500 Platteklouf  
Tel: +27 21 930 1134  
Fax: +27 086 763 7942  
www.ppecb.com

SGS South Africa (Pty) Ltd  
First floor, Panther Park, 11 Berkley Rd, Maitland 11  
7405 Cape Town  
South Africa  
Tel: +27 21 506 3280  
Fax: +27 866136602

### The following are the certification bodies with branches in South Africa

BCS South Africa

BCS Öko-Garantie GmbH (Subcontracted CB)

P.O. Box 910-1083 0120 Pyramid  
Tel: +27 (12) 545 04 09  
Fax: +27 (12) 545 04 09

southafrica@bcs-oeko.com

Bureau Veritas Certification South Africa

Bureau Veritas Certification S.A.U. (Spain)

L496 Summit Road 1st Floor Summit Office Park 2096 Morningside, Johannesburg, 2096

Tel: +27 11 666 05000

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Control Union Certifications South Africa

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2012

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