



NQF Level: 2 US No: 116070

# Assessment Guide

## Primary Agriculture

### Operate and Support a Food Safety and Quality Management System in the Agricultural Supply Chain



Assessor: .....

Workplace / Company: .....

Commodity: ..... Date: .....

## Before we start...

This assessment guide contains all necessary activities and instructions that will enable the assessor and learner to gather evidence of the learner's competence as required by the unit standard. This guide was designed to be used by a trained and accredited assessor whom is registered to assess this specific unit standard as per the requirements of the AgriSETA ETQA.

Prior to the delivery of the program the facilitator and assessor must familiarise themselves with content of this guide, as well as the content of the relevant Learner Workbook.

The assessor, facilitator and learner must plan the assessment process together, in order to offer the learner the maximum support, and the opportunity to reflect competence.

The policies and procedures that are required during the application of this assessment are available on the website of the AgriSETA and should be strictly adhered to. The assessor must familiarise him/herself with this document before proceeding.

This guide provides step-by-step instructions for the assessment process of:

<b>Title:</b>	Operate and support a food safety and quality management system in the agricultural supply chain		
<b>US No:</b>	<b>116070</b>	<b>NQF Level:</b>	<b>2</b>
		<b>Credits:</b>	<b>2</b>

This unit standard is one of the building blocks in the qualification listed below. Please mark the qualification you are currently assessing, because that will be determined by the context of application:

Title	ID Number	NQF Level	Credits	Mark
National Certificate in Plant Production	48975	2	120	<input type="checkbox"/>
National Certificate in Animal Production	48976	2	120	<input type="checkbox"/>
National Certificate in Mixed Farming Systems	48977	2	120	<input type="checkbox"/>

Please mark the learning program you are enrolled in:

Are you enrolled in a:	Y	N
Learnership?	<input type="checkbox"/>	<input type="checkbox"/>
Skills Program?	<input type="checkbox"/>	<input type="checkbox"/>
Short Course?	<input type="checkbox"/>	<input type="checkbox"/>

### Note to Assessor:

If you are assessing this module as part of a full qualification or learnership, please ensure that you have familiarized yourself with the content of the qualification.

**1**  
**SO 1**

**Group work:** Brainstorm in your group

**Learner Guide: Page 24**                      **Facilitator Guide: Page 12**

Hold a brainstorming session and write down what you think the advantages for a Crop Producer might be, in terms of applying good food safety practices and principles on their farm and in their pack house.

**Model Answer(s):**  
Sustainable income & farming activities; continuous job security; safe food that doesn't harm or hurt; improved shelf-life of fruit.

**My Notes ...**

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**2**

**SO `1 AC 1**

**Role-play and discover**

**Learner Guide: Page 25      Facilitator Guide: Page 13**

In groups of four, play the roles of 4 different types of farm workers and explain to each other how your "type" of personal hygiene personality, might compromise food safety. Write down keynotes for yourself.

**Model Answer(s):**

- Type 1 –** A farm worker with an old, dirty uniform.  
Possible cross contamination of fruit; possible cross contamination to other workers; negative work environment due to disgust from co-workers
- Type 2 –** A farm worker with dirty hair and has a runny nose.  
High risk of bacterial/viral contamination of fruit; negative work environment due to disgust from co-workers
- Type 3 –** A farm worker who has not had a bath for the past 2 weeks.  
High risk of physical & microbial contamination; high risk of body odour affecting flavour of fruit; negative work environment due to disgust from co-workers
- Type 4 –** A farm worker who does not wash their hands after going to the toilet.  
Extremely high risk of causing food poisoning; hidden danger.

**My Notes ...**

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**3**

**SO 1 AC 2**

**Walk around and discover:**

**Learner Guide: Page 26      Facilitator Guide: Page 13**

Walk around on the farm where you are completing your practical learning and make a list of at least 10 different types of waste that might potentially cause food safety to become compromised. Explain why, for each item on the list.

**Model Answer(s): (could be added to from your experience)**

- Empty chemical containers- extremely high risk of chemical contamination & food poisoning.
- Food wastes-high risk of cross contamination.
- Discarded fruit-high risk of cross contamination & spoilage.
- Effluent-extremely high risk of microbial contamination & food poisoning.
- Drain water- extremely high risk of microbial contamination & food poisoning.
- Animal or Plant remains- extremely high risk of microbial contamination & food poisoning.
- Garbage- high risk of cross contamination.
- Faeces- extremely high risk of microbial contamination & food poisoning.
- Fertiliser residues- extremely high risk of chemical contamination & food poisoning.
- Oil and grease-high risk of physical & chemical contamination & spoilage.

**My Notes ...**

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**4**

**SO 1 AC 3**

**Hold a class discussion and write a paragraph on the decision made:**

**Learner Guide: Page 27      Facilitator Guide: Page 13**

1. What is the use of placing warning signs around the farm?

**Model Answer(s): (could be added to from your experience)**

Alerts to high risk areas; alerts to preventative measures against food contamination, injury and accidents, serves as information source; restricts access.

2. What types of warning signs are most important and what do they mean?

**Model Answer(s): (could be added to from your experience)**

Relative to farm environment of specific learner.  
Possibly warning signs, info signs regarding uniforms and safety, restricted access.

3. Why it is important for workers to adhere to safety and warning signs?

**Model Answer(s): (could be added to from your experience)**

Ensures health, hygiene & safety, protecting the worker & the food product.

**My Notes ...**

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## 5

SO 2 `AC 1

**Walk around on the farm and discover:**

**Learner Guide: Page 33**

**Facilitator Guide: Page 14**

Make a list of at least 10 possible points where the Occupational Health and Safety and / or Food Safety policy of the farm is being deviated from or is not complied with. For each one write next to it, why you think the deviation took place and what can be done to rectify the problem.

**Model Answer(s):**

Deviation / Non-compliance:	Reasons for it:	What can be done to remedy this:
Varies between farms according to circumstances, policies & challenges.		
Irrigation water not sampled & tested to check for microbial safety.	Inappropriate staff training; no monitoring system.	Train staff; put monitoring procedure in place.
Unauthorised personnel enter restricted areas.	No list defines personnel that hold access to restricted area; no sign in register for persons entering restricted areas.	Define in writing & place list visibly at entrance to restricted areas; have all persons entering restricted areas sign in and out.

### My Notes ...

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**Interview one of the members of the health and safety committee on the farm where you are completing your training and record answers to the following questions:**

**Learner Guide: Page 40**

**Facilitator Guide: Page 16**

1. If you had to give a brief overview of the objectives of the Occupational Health and Safety Act of South Africa, what would you say?

**Model Answer(s):**

- ◆ To promote safe environments for people to live and work in. Many of the health problems facing South African communities are caused or made worse by living and working in poor conditions. For example, having poor water and sanitation facilities or working in dangerous conditions without any safety measures.
- ◆ To develop healthy public policy. This is legislation and policy that protects health. For example, this can range from tobacco control legislation through to ensuring that housing policy protects the health of people by ensuring that, for example, it provides for adequate ventilation or sanitation facilities
- ◆ To promote community action. Health problems are often best tackled through community action. This could include community clean-up campaigns or setting up an HIV/AIDS support group in a community
- ◆ Develop personal skills. It is essential that each person is equipped with the information and skills to promote their health. For example in South Africa everyone needs to know about AIDS, and young people need to learn how to negotiate safe sex or how to say no to sex.
- ◆ Re-orient the health service. Often the health service does not act in the best interest of people's health. Clinics are often not open in the early evening when it may be easier for working people to get to them and environmental health officers may over emphasize the role of inspections and law enforcement rather than education for food traders.

2. Explain the main duties and functions of members of the Health and Safety Committee on the farm:

**Model Answer(s): (could be added to from your experience)**

Committee should comprise of Health & Safety representatives & inspectors to instruct employees as soon as an employer employs more than 20 people.

Committee Duties: Make & keep records of recommendations to employers & inspectors; To discuss a report and keep records of incidents/accidents in which someone is killed/injured/becomes ill.



**Explain in your own words**

**Learner Guide: Page 41      Facilitator Guide: Page 16**

1. What do you think the consequences for someone who has HIV / AIDS might be in relation to food safety?

**Model Answer(s):**

An HIV / AIDS sufferer should take extra care against contracting food safety or food that might hurt or harm due an already compromised immune system.

2. What do you think the consequences for food safety might be, if the produce is handled by someone who has HIV / AIDS?

**Model Answer(s):**

In terms of pre-harvest practices, little or no impact of such a person handling the fruit other than the standard food safety concerns for any other workers. Should be clear that no discrimination be present against sufferers performing these duties. Alternate considerations are applicable at post-harvest handling.

**My Notes ...**

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**SO 3 AC 1**

**In pairs, role-play and explain the reasons why...**

**Learner Guide: Page 42      Facilitator Guide: Page 17**

1. Pick a type of Communicable disease from the list below.

Then practice informing the team leader / supervisor that you have contracted this disease.

The other party will be the team leader / supervisor and will have to make the appropriate decision of what action the worker should take. This person will also explain to the worker why the decision is important for the security of food safety. Make keynotes for yourself.

- |                  |               |
|------------------|---------------|
| ◆ Measles        | ◆ Chicken pox |
| ◆ German measles | ◆ Influenza   |
| ◆ TB             | ◆ Rabies      |
| ◆ Avian Flu      | ◆ Diarrhoea   |

**Model Answer(s):**

<ul style="list-style-type: none"> <li>◆ Measles</li> <li>◆ Chicken pox</li> <li>◆ German measles</li> <li>◆ Influenza</li> <li>◆ TB</li> <li>◆ Rabies</li> <li>◆ Avian Flu</li> <li>◆ Diarrhoea</li> </ul>	<p>Methods of informing might include: Send a messenger, forwarding sick note, make a phone call, personally inform.</p>
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**Model Answer(s): (Continued)**

<ul style="list-style-type: none"> <li>◆ Measles</li> <li>◆ Chicken pox</li> <li>◆ German measles</li> <li>◆ Influenza</li> <li>◆ TB</li> <li>◆ Rabies</li> <li>◆ Avian Flu</li> <li>◆ Diarrhoea</li> <li>◆ Foot and Mouth Disease</li> </ul>	<p>Employer's reaction:</p> <p>All disease, worker sent to doctor, allowed time off for recuperation.</p> <p>None of these diseases permit workers to handle fruit/food.</p> <p>TB: Employer to report disease to Health Services in area; worker to be sent to specific TB hospital to recover.</p> <p>Rabies, avian flu, foot &amp; mouth disease: Employer to report disease to Health Services in area; farm owner to report occurrence to State Vet, Department of Agriculture &amp; CDC (would probably lead to quarantine of area).</p>
<ul style="list-style-type: none"> <li>◆ Measles</li> <li>◆ Chicken pox</li> <li>◆ German measles</li> <li>◆ Influenza</li> <li>◆ TB</li> <li>◆ Rabies</li> <li>◆ Avian Flu</li> <li>◆ Diarrhoea</li> <li>◆ Foot and Mouth Disease</li> </ul>	<p>Importance to food safety.</p> <p>Handling or working with food while having these diseases endangers the food and other workers due to contagious nature of diseases.</p>

**My Notes ...**

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**SO 4 AC 2**

**Brainstorm as a group**

**Learner Guide: Page 48      Facilitator Guide: Page 18**

For each of the following category of hazards – brainstorm as many examples on the farm as you can come up with:

**1. Physical Hazard**

**Model Answer(s):**

Cigarettes, cigarette butts, nails, nuts, bolts, bone fragments, feathers, plastic, foil packaging, dust, soil.

**2. Chemical Hazard**

**Model Answer(s):**

Pesticide residues, veterinary residues, oil, grease, cleaning chemicals, non-permissible additives, excess of admissible additives.

**3. Microbiological Hazard**

**Model Answer(s):**

Bacteria, viruses, fungi, protozoa.

**My Notes ...**

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**10**

**SO 4 AC 1**

**As a group make a 10-minute presentation to the rest of the class explaining the following.**

**Learner Guide: Page 52**

**Facilitator Guide: Page 19**

**(Write keynotes for yourself below)**

1. What HACCP means.

**Model Answer(s):**

Food Safety and Quality Hazard Analyses Critical Control Point.

2. Why a HACCP system might be implemented?

**Model Answer(s):**

To monitor & ensure food safety.

3. What the 7 principles of HACCP are.

**Model Answer(s):**

**Principle #1 Hazard Analysis**

Hazards (biological, chemical, and physical) are conditions, which may pose an unacceptable health risk to the consumer. A flow diagram of the complete process is important in conducting the hazard analysis. The significant hazards associated with each specific step of the manufacturing process are listed. Preventive measures (temperature, pH, moisture level, etc.) to control the hazards are also listed.

**Principle #2 Identify Critical Control Points**

Critical Control Points (CCP) are steps at which control can be applied and a food safety hazard can be prevented, eliminated or reduced to acceptable levels.

**Principle #3 Establish Critical Limits**

All CCP's must have preventive measures, which are measurable! Critical limits are the operational boundaries of the CCPs which control the food safety hazard(s). The criteria for the critical limits are determined ahead of time in consultation with competent authorities. If the critical limit criteria are not met, the process is "out of control", thus the food safety hazard(s) are not being prevented, eliminated, or reduced to acceptable levels.

**Model Answer(s): (Continued)**

**Principle #4    Monitor the CCP's**

Monitoring is a planned sequence of measurements or observations to ensure the product or process is in control (critical limits are being met). It allows processors to assess trends before a loss of control occurs. Adjustments can be made while continuing the process. The monitoring interval must be adequate to ensure reliable control of the process.

**Principle #5    Establish Corrective Action**

HACCP is intended to prevent product or process deviations. However, should loss of control occur, there must be definite steps in place for disposition of the product and for correction of the process. These must be pre-planned and written.

**Principle #6    Record keeping**

The HACCP system requires the preparation and maintenance of a written HACCP plan together with other documentation. This must include all records generated during the monitoring of each CCP and notations of corrective actions taken. Usually, the simplest record keeping system possible to ensure effectiveness is the most desirable.

**Principle #7    Verification**

Verification has several steps. The scientific or technical validity of the hazard analysis and the adequacy of the CCP's should be documented. Verification of the effectiveness of the HACCP plan is also necessary. The system should be subject to periodic revalidation using independent audits or other verification procedures.

HACCP offers continuous and systematic approaches to assure food safety.

**My Notes ...**

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**11**

**SO 5 AC 3-4**

**Research and write a brief report**

**Learner Guide: Page 58      Facilitator Guide: Page 21**

1. Go to the farm where you are completing your practical learning and find out "How and where certain files will be found":

**No model answer supplied due to area & policy variation:**

- Regarding chemical usage.
- Regarding training.
- Regarding environmental issues.
- Systematic filing of personnel records.
- Manual filing.
- Electronic filing.

2. Now explain the process that will be followed to find or identify where a problem in the operation occurred.

**No model answer supplied due to area & policy variation:**

- Traceability, PPECB audits if applicable & practiced.

**My Notes ...**

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### Assessment Feedback Form

Comments / Remarks	
<b>Feedback to learner on assessment:</b>	
<b>Feedback from learner to assessor:</b>	
<b>Learner's Signature:</b>	<b>Date:</b>
<b>Assessor's Signature:</b>	<b>Date:</b>



# Summative Test and Attitude & Attribute Evaluation

**B**efore the knowledge test is undertaken, the learner must be reminded of what is expected from him / her in terms of summative and reflexive competence. Read and explain to the learner, the **Preparation for Your Final Assessment** section in the learner workbook. Learners and assessor should sign off this section to acknowledge that this step was completed.

Please set up a knowledge test from the questions given as a guideline to learners and supply each learner with a test sheet.

Supply each report with the following heading:

<b>Unit Standard:</b>	<b>116070</b>	<b>NQF Level:</b>	2
<b>Learner Name:</b>			

Questions	Model Answers
1. What product does the farm produce that might be affected by food safety practices?	Answer will be different for different areas and commodities.
2. What are the rules regarding worker personal hygiene who handles this product?	Good worker hygiene practices during production and harvest can help to minimize microbial contamination. Therefore, it is important to make worker health and hygiene a priority: Frequent and effective hand washing is important. To make this possible, toilet facilities must be available, clean, and well maintained.
3. What are the rules regarding the wearing of uniforms by workers handling this product?	Wear only closed protective shoes or boots. Uniforms should be worn as per farm and pack house regulations, and should be clean and tidy at all times.

<p>4. What are the rules regarding contagious diseases contracted by workers handling this product?</p>	<p>If you or any of the other workers are ill, then report it immediately and it should be addressed by your supervisor or team leader immediately.</p> <p>Infected employees – those with infectious diseases or open lesions/wounds - could increase the risk of transmitting food borne illnesses. All open wounds and infected areas should be covered hygienically with dressings and with additional pairs of gloves. If there is any risk of contamination, then the worker CANNOT continue working.</p> <p>Workers with symptoms of nausea, vomiting or diarrhoea should not handle the fruits or vegetables.</p>
<p>5. What rules are there regarding the storage of things on the farm to ensure food safety?</p>	<p>The answer will differ but should include</p> <ul style="list-style-type: none"> <li>• Storage registers and control sheets</li> <li>• A quality control system like HACCP</li> </ul>
<p>6. What can go wrong in terms of food safety for this product?</p>	<p>Answer will be different for different products</p>
<p>7. What will happen if the food safety of this product was compromised?</p>	<p>There are a number of repercussions that might occur:</p> <ul style="list-style-type: none"> <li>• Legal claims may be made against the company</li> <li>• Los of income due to bad publicity and consumers not trusting the quality of the companies products</li> <li>• People responsible may loose their jobs</li> <li>• Markets may refuse to buy from the company in the future.</li> <li>• The health department may close the company down in severe cases.</li> </ul>
<p>8. How will the farm react if a product from the farm caused food poisoning?</p>	<ul style="list-style-type: none"> <li>• People responsible may loose their jobs</li> <li>• Legal claims may be made against the person/people responsible.</li> </ul>

### Assessment Feedback Form

Comments / Remarks	
Feedback to learner on assessment and / or overall recommendations and action plan for competence:	
Feedback from learner to assessor:	
<p><b>Assessment Judgement</b> You have been found:</p> <p><input type="radio"/> Competent</p> <p><input type="radio"/> Not yet competent in this unit standard</p>	<p>Actions to follow:</p> <p><input type="radio"/> Assessor report to ETQA</p> <p><input type="radio"/> Learner results and attendance certification issued</p>
<p><b>Learner's Signature:</b></p>	<p><b>Date:</b></p>
<p><b>Assessor's Signature:</b></p>	<p><b>Date:</b></p>
<p><b>Moderator's Signature:</b></p>	<p><b>Date:</b></p>