



## **DRAFT TANZANIA STANDARD**

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### **Honey collection center - General requirements**

**TANZANIA BUREAU OF STANDARDS**

## **0. Foreword**

Honey collection center is a building where honey is purchased on a graded basis the center will enable to operate under full capacity to cater for full production and upgrade marketing.

This Tanzania standard provides requirements for premises, utilities, equipment, operations and management of honey collection center

This Tanzania Standard was prepared to ensure the honey handled in a collection center in hygienic manner to assure its quality and safety.

In the preparation of this Tanzania Standard assistance was drawn from RS 569 Bee products collection centre – Basic requirements

## **1. Scope**

This Tanzania standard provides requirements for premises, utilities, equipment, personnel, operations and management of bee products collection center.

## **2. Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

TZS 789, Portable water –Specification

TZS 109, food processing units — Codes of hygiene

## **3. Terms and definitions**

For the purposes of this standard, the following terms and definitions apply

### **a) Honey Collection Centre (HCC)**

premises where honey product is collected from beekeepers

### **b) laboratory**

room within the complex of the HCC where honey/ bee products is subjected to basic quality and safety tests

#### **4. Operational License**

Bee products collection Centre shall be licensed by the relevant authority.

#### **5. Location**

- a) The location of honey products collection center shall comply to the land use and zoning requirements provided by the relevant authority
- b) bee products collection center shall be in the appropriate location distanced from any source of contamination.
- c) shall be sufficient space for accommodation of vehicle parking and other essential inputs.
- d) The honey products collection Center shall be accessible by road.
- e) The honey products collection Centre shall have access to facilities such as clean water and reliable power supply.

#### **6. General facility design requirements**

- a) The building materials used shall comply with relevant standards.
- b) Building shall be structurally sound and hygienically designed and constructed to prevent cross-contamination from exterior, and to be safe and proper for operation.
- c) Building design and layout shall be designed so that there is a separation of clean and unclean working operations.
- d) The buildings and facilities shall be designed to prevent the entrance and harboring of pest and the entry of environmental contaminants such as smoke and dust.
- e) The foundations shall be adequately designed to carry the all loads of the building and shall be termite proofed.
- f) The floor shall be finished with non-absorbent, easy to clean, non-slip materials and without crevices.



- f) Wall finishes shall be made of materials that do not cause contamination. Interior surface shall be smooth without dirt accumulation, clean and undamaged, with no opening passage to prevent contamination.
- g) The roof of the bee products collection center shall be such that it does not transmit any undesirable substances to the product being handled.
- h) Ceiling shall be designed, constructed and finished as to prevent the accumulation of dirt and minimize condensation, mould development and flaking and shall be easy to clean.
- i) All doors shall be flush finished on the interior side, capable of easy cleaning, non-absorbent and shall be protected on both sides by non-corroding metal kick plates to prevent damage which may provide access for rodents, where appropriate, be self-closing and close fitting.
- j) All windows shall be provided with non-corrosive screens fitted to the outside which shall be removable for cleaning and the sills shall be slopping.
- k) The HCC shall be fenced to avoid unauthorized entrance.
- l) The HCC shall have hand washing facilities

## **7. HCC layout requirements**

### **7.1. Reception area**

Hygienic measures shall be in place before entering the building, room or area for raw honey/bee product receiving,

- i. Clean and undamaged doors or plastic curtains shall be closed tightly to prevent dust and insect.
- ii. Floor shall be made of non-abrasive, non-corrosive, non-absorbent and easy to clean materials, undamaged, and shall drain easily.

### **7.2. Receiving areas**

7.2.1. The receiving areas shall be distanced from parking area to prevent contamination.

7.2.2. The area shall be well lighted to facilitate the reception.

7.2.3. A drainage system shall be well flown, undamaged, clean, and shall be:

- i. equipped with wire-mesh before draining out of the building, in case of closed drains, and
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- ii. equipped with U-shaped gutters, in case of open drains.

### **7.3. Laboratory**

7.3.1. The laboratory shall have sufficient area for the purpose and comply to relevant laboratory design standards.

7.3.2. The floor shall be of non-absorbent, washable and non-slip materials, without crevices, easy to clean and disinfect.

7.3.3. The wall shall be non-absorbent and easy to clean

### **7.4. Cleaning area for equipment**

7.4.1. Honey products collection center shall be provided with indoor cleaning room as follows:

7.4.1.1. the floor shall be made of non-absorbent, washable and non-slip materials without crevices, easy to clean and disinfect.

7.4.1.2. the wall shall be finished with non-absorbent, washable and easy to clean materials

7.4.1.3. hot and cold-water supply shall be available in the cleaning room.

7.4.2. Washing areas shall be as follows:

- i. the washing area should be distanced from parking area to prevent contamination;
- ii. washing areas should be designed and finished as to facilitate the operations;
- iii. washing areas should be finished with non-absorbent materials and easy to clean;
- iv. floor should be slope and able to rapidly drain out the water;
- v. sufficient and appropriate cleaning tools for empty honey products containers shall be provided

### **7.5. Office space**

7.5.1. Office in the honey collection center shall not cause any contamination to the honey receiving building

7.5.2. The office space shall be:

- a) easily accessible for staff and other visitors;

- b) clearly sign posted;
- c) well aerated;
- d) safe and unobstructed; and
- e) clean, naturally well-lit and suitably furnished.

## **7.6. Toilets and urinals**

7.6.1. Honey collection center shall be provided with separate and designated toilets and urinals. as follows:

- a) toilets and urinals for male and female shall be separately constructed in an area that does not bring ill effect on the collected bee products;
- b) toilets inside the bee products collection center shall be hygienic, located in appropriate position, adequate and able to prevent cross-contamination effectively;
- c) the floor of the toilets and urinals shall be non-absorbent, washable and non-slip, without crevices and shall be easy to clean and disinfect. The floors shall slope sufficiently for liquids to drain to trapped outlets including grates;
- d) the wall shall be constructed from non-absorbent, washable materials and they shall be smooth and without crevices and shall be easy to clean and disinfect;
- e) the toilets and urinals shall be furnished with appropriate hand washing facilities equipped with hygienic materials such as liquid soap or solid soap sanitizers, disposable towels or air-drying equipment or tissue paper dispenser.
- f) Design shall take into consideration of toilet facilities for persons with disabilities.

## **7.7. Shower and changing rooms**

7.7.1. There shall be separate changing room and shower for male and female workers

7.7.2. Shower and changing room shall be hygienic, located in appropriate positions, adequate and able to prevent cross-contamination effectively. They shall have shower faucets and other plumbing fixtures

7.7.3. Showers and changing room shall be finished with non-absorbent, washable and easy to clean materials

7.7.4. Changing rooms shall be furnished with labelled lockers.

7.7.5. All cleaning materials shall be provided.

## **7.8. Ventilation and Lighting**

Indoor ventilation shall be as follows:

- a) ventilation system shall be designed and installed as to allow better air flow and not allow dampening.
- b) Such system or device shall not be installed in an area that may cause contamination to bee products
- c) Lighting shall be adequately provided as per relevant standards specific to the use of each room. Natural lighting shall be utilized where possible.

## **8. Utilities**

### **8.6. Road accessibility**

8.6.1. Access roads to bee products collection center shall be at least designed and maintained

8.6.2. The building verge, main internal access road, loading bays and all areas serving vehicular traffic shall be either paved or tarred.

### **8.7. Water and electricity**

8.7.1. Running water under pressure shall be easily accessible to all rooms and areas in which honey is handled and equipment are washed.

8.7.2. The water used shall comply with TZO 789.

8.7.3. HCC shall be equipped with water storage tanks of adequate capacity to ensure the availability of water at all times. Where possible water storage shall be equipped with a pumping system.

8.2.8 Installation of electric wires and sockets shall be neat, well arranged and shall be in the position that is safe for operators.

8.2.9 Light bulb shall be equipped with clean bulb cover that has no dust, cobweb or dirty stain, particularly in the risky areas, such as an area over the honey receiving area.

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8.2.10. Light bulb shall be undamaged, able to provide sufficient light and functional at every operating area, particularly those areas that are the critical control point of food safety such as receiving area, cleaning area for equipment and tools and chemical preparation area for cleaning,

## **9. Equipment and tools**

- 9.1. Adequate and effective equipment shall be available
- 9.2. Equipment installation layout shall be in line with the flow of activities.
- 9.3. Equipment surface in contact with honey shall be made of rust-free metal.
- 9.4. Equipment shall be installed in the positions that facilitate the operation, maintenance and cleaning.
- 9.5. Safety systems for personnel protection shall be in place.

## **10. Transportation**

Transportation of honey products shall be prepared appropriately and hygienically so as to prevent cross contamination.

## **11. Hygiene**

### **11.1. General requirements**

Operation in the Honey Collection Centre shall be done accordance with the provisions in TZS 109.

### **11.2. Personal hygiene management**

- 11.2.1. Hygiene of receiving operators shall be monitored in order to reduce the possibility of contamination during the operations and recorded regularly for assessment as follows:
  - a) nails shall be clipped and kept clean;
  - b) uniform or clothes shall be clean;
  - c) hair shall be entirely covered with cap as well as mouth and nose shall be covered with a mask during operations;

- d) apron shall be clean;
- e) wear clean boots or shoes for use in a specific area;
- f) do not wear any accessories during the operations;
- g) establish hygienic rules for operators who have any symptom of gastrointestinal diseases, respiratory diseases or wound that may cause honey/bee product contamination;
- h) report annual health examination.

**11.2.3** Train and check the operators whose works are involving in honey product in order to acquire basic knowledge according to standard of good practices as follows:

**11.2.3.1** Train operators before beginning work in order to assure their ability to practice the assignment.

**11.2.3.2** Train the operators on the specific areas of their responsibility, i.e, repairing and maintenance of equipment, calibration of the scale and temperature measurement device as well as laboratory analysis.

**11.2.3.4** Train the driver on good hygienic practices for honey products transportation.

**11.2.3.5** Provide training to review and refresh their knowledge.

## **12. Safety measures and environmental management**

Safety measures concerning operating areas, equipment, management of chemicals and their containers including environmental management in waste water treatment system shall be established according to relevant regulations

**12.1.** Safety measures shall be as follows:

- a) the security shall be guaranteed by either security guards or CCTVs;
- b) alarm device or system for operating areas shall be in place in order to remind operators to be more careful and to warn in the risky area in which the danger may occur;
- c) First-Aid kit and training course thereof shall be provided;
- d) fire extinguishers shall be installed;
- e) personal Protective Equipment (PPE) shall be provided to protect

f) personnel from injury during chemical preparation. The PPE shall be indicated by sign, easily reached and properly used.

## **12.2. Drainage system**

Drainage system inside the honey products collection center shall be as follows:

- a) closed drains shall be equipped with sieves in order to prevent clogging or gradual accumulation of debris;
- b) open drains shall be U-shaped in order to be cleaned easily and unable to accumulate debris;
- c) in case of waste water drainage without using drain inside the building, the floor shall be slope and able to rapidly drain out in order to ensure that there is no water logging causing contamination;
- d) drains shall be clean, undamaged and good conditions with sufficient slope for well drainage;
- e) drains shall have sieve for filtering prior to releasing outside the building.
- f) waste water treatment system shall not generate disturbing odour, pollution and contamination to the center.
- g) effectiveness of waste water treatment shall be monitored, recorded and documented for traceability purpose.

## **13. Waste management**

13.1. There shall be waste disposal system subject to environmental protection principles.

13.2. The waste disposal area shall be located in a way to avoid harborage of rodents.

## **14. Record keeping**

Records shall be kept for the quantity collected, variety, suppliers' identification and distribution details,