Dental medium Clinic Requirement
Tables of Contents

1. Scope .......................................................................................................................... 3
2. Normative References .................................................................................................. 3
3. Terminologies and Definitions .................................................................................... 3
4. General Requirement .................................................................................................. 4
5. Specific Requirement .................................................................................................. 5
5.1 Outpatient Services .................................................................................................... 5
5.2 Housekeeping & Maintenance Services ...................................................................... 18

Foreword

This Ethiopian Standard has been prepared under the direction of the Technical Committee for Healthcare Practices, (TC 90) and published by the Ethiopian Standards Agency (ESA).

This Compulsory Ethiopian Standard cancels and replaces ES 3620:2012 Dental Medium Clinic.

Application of this standard is COMPULSORY with respect to health & safety. A Compulsory Ethiopian Standard shall have the same meaning, interpretation and application of a "Technical Regulation" as implied in the WTO-TBT Agreement.

Implementation of this standard shall be effective as of xxxx October 20xxx.
Dental Medium Clinic Requirement

1. Scope

These Ethiopian standards provide minimum requirements for the establishment and maintenance of dental medium clinic with respect to practices, premises, professionals and products or materials put into use for the clinic.

2. Normative References

3. Terminologies and Definitions

3.1. Appropriate Organ: Shall mean a state government organ authorized to implement food, medicine and healthcare administration and control activities at a state level;

3.2. Authority: Shall mean the Ethiopian Food, Medicine and Healthcare Administration and Control Authority.


3.4. Appropriate Law: Shall mean a law issued by a state to implement regulatory activities regarding food, medicine and healthcare.

3.5. Person: Shall mean any physical or juridical person.

3.6. Authorized Person: Shall mean any specialty clinic staff who is responsible for a given service.

3.7. Dental medium Clinic: Shall mean health care facility where promotive, preventive, curative and rehabilitative dental health services are provided at ambulatory level together with diagnostic facilities appropriate to this level of care.
4. General Requirement

4.1 The dental medium clinic shall be directed by licensed dental surgeon (DDM) / Bachelor of Dental Sciences (BDSc).

4.2 The dental medium clinic shall provide service at outpatient/ambulatory level only.

4.3 Emergency care specific to the specialty with a qualified staff shall be available during working hours.

4.4 The dental medium clinic shall have triage.

4.5 The dental medium clinic shall avail updated reference materials, treatment guidelines and manuals for common disease.

4.6 Diseases under national surveillance shall be notified to the FMOH through the proper reporting channel.

4.7 The dental medium clinic shall have a program of continuous quality improvement for the service which includes regularly collecting and analyzing data to help identify health-service problems and their extent, and recommending, implementing, and monitoring corrective actions on the basis of these data.

4.8 The dental medium clinic shall establish quality team to improve quality of service deliveries.

4.9 The dental medium clinic shall assess its staffs current knowledge and practice and observes utilization of national guidelines for the services it renders every six month.

4.10 The dental medium clinic shall provide or facilitate training to their staffs.

4.11 The dental medium clinic shall display the following at visible place:
   a) List of Services available in the clinic during working hours & after working hours,
   b) List of Professionals working in the clinic during & after working hours,
   c) Updated list of Various fees and prices,

4.12 The dental medium clinic facilities shall be well marked and easily accessible for persons with disability.

4.13 The dental medium clinic shall have fire extinguisher placed in visible area.

4.14 All employees, including part-time and contract shall be trained in fire-fighting equipment and patient evacuation of clinic’s buildings as part of their initial orientation and at least annually thereafter.
4.15 Fire extinguishers shall be visually inspected at least monthly; fully inspected at least annually, recharged, repaired and hydro-tested as required by manufacturer's instructions; and labelled with the date of the last inspection.

4.16 Potential source of accidents shall be identified and acted upon like slippery floors, misfit in doorways and footsteps.

4.17 All patient care rooms shall be provided with running water supply & functional hand washing basin.

4.18 The Internal surfaces of the clinic (floors, walls, and ceilings) shall be:
   a. Smooth, impervious, free from cracks, recesses, and projecting ledges.
   b. Easy to clean and decontaminate effectively,
   c. Constructed of materials that are non-combustible or have high fire-resistance and low flame-spread characteristics.

4.19 The circulation ways and sub corridors shall be a minimum 1.60m wide.

4.20 Patient serving corridors should not be less than 2.40m wide.

4.21 Glass doors shall be marked to avoid accidental collision.

4.22 Dental medium clinic where functional units are at different floor shall have a mechanism of accessing all the functioning rooms horizontally either by stairs and ramp or stair and elevator.

4.23 The dental medium clinic shall have established system for verbal and written communication about patient care.
   a. Verbal communication includes the communication with treating physician & other service units (like Laboratory & X-Ray units) & giving education for clients & families.
   b. Written communication includes use of clinical forms and nursing care plan for patients.

4.24 The dental medium clinic shall carryout workload analysis.

5. Specific Requirement

5.1 Outpatient Services

5.1.1 Practices:
5.1.1.1 Dental services at medium clinic level shall be available at least during the regular working hours based on their scope of practice. This includes
   a. Restorative
   b. Endodontic,
   c. Prosthetic,
   d. Orthodontics therapy (Optional)
   e. Periodontal therapy,
   f. Exodontia,
   g. Oral Health Education
   h. Minor oral surgery

5.1.1.2 The dental medium clinic shall provide the following outpatient services.
   a. Care of ambulatory patients and follow up of ambulatory patients for conditions.
   b. Preventive and health promotion services.
   c. Care for patients with chronic illnesses and do follow ups.

5.1.1.3 Patient assessment at dental medium clinic shall include;
   a. Comprehensive medical and social history,
   b. Physical examination including at least:
      • Vital sign (BP, PR, RR, T°, pain assessment) height and weight,
      • Clinical examination pertinent to the illness,
   c. Diagnostics impression, and
   d. Laboratory and Imaging services
   e. Other medical workups when indicated.

5.1.1.4 The range of relevant treatment options and the clinical impression shall be fully described to client and/or their families and documented on patient’s medical record accordingly.

5.1.1.5 Information contained in the dental record shall be complete respect to the patient's history, physical examination, oral (Intra & Extra) examination, diagnosis, diagnostic procedures, medication administration, and treatment to facilitate continuity of care.

5.1.1.6 Written and verbal Informed Consent shall be obtained and documented for every dental procedure.

5.1.1.7 The dental medium clinic shall have a system that the nurse takes vital sign and other necessary assessments to make the patient ready for dental service.
5.1.1.8 The dental service shall be provided in accordance with infection prevention standards.

5.1.1.9 The dental medium clinic may have dental laboratory service as per the standard described for dental laboratory.

5.1.1.10 The dental medium clinic shall have functional referral system which includes at least:
   a. List of conditions indicative for urgent referral,
   b. SOP for selection of cases for referral,
   c. Procedure for referring patients directly to respective (higher) services,
   d. List of potential referral sites with contact address (i.e., referral directory),
   e. Referral forms,
   f. Referral tracing mechanism (linkage),
   g. Feedback providing mechanism,
   h. Documentation of referred clients.

5.1.2 Premises

5.1.2.1 The outpatient service shall be well marked and easily accessible for disabled clients, elderly, children’s and pregnant mother.

5.1.2.2 Patient waiting area and Corridor shall be safe and child friendly.

5.1.2.3 Communication system shall be connected with major functional areas.

5.1.2.4 All outpatient rooms shall have adequate light, and ventilation.

5.1.2.5 All rooms for patient care shall promote patient dignity and privacy.

5.1.2.6 The dental clinics shall have IEC and entertaining materials in the waiting area.

5.1.2.7 The facility for Medium Dental clinic shall have the following premises:

<table>
<thead>
<tr>
<th>Premises required</th>
<th>No of room required</th>
<th>Area required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception, Recording &amp; Waiting area for oral health education</td>
<td>1</td>
<td>20 sq. m</td>
</tr>
<tr>
<td>Examination and treatment room with dental unit</td>
<td>1</td>
<td>12 sq. m</td>
</tr>
<tr>
<td>Dental x-ray room (optional) if it is not separate machine</td>
<td>1</td>
<td>4 sq. m as per ERPA</td>
</tr>
<tr>
<td>Cleaning and Sterilization room</td>
<td>1</td>
<td>8 sq. m</td>
</tr>
<tr>
<td>Toilet room (staff/ patient) (male &amp; female)</td>
<td>2</td>
<td>4 sq. m each</td>
</tr>
<tr>
<td>Staff or changing room</td>
<td>1</td>
<td>6 sq. m</td>
</tr>
</tbody>
</table>
5.1.3 **Professionals**

5.1.3.1 The clinic shall be directed by a licensed dental surgeon (DDM)/Bachelor of Dental Sciences (BDSc).

5.1.3.2 The clinic shall have the following minimum number of professionals:

<table>
<thead>
<tr>
<th>Professionals required</th>
<th>Number required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental surgeon /BDSc</td>
<td>1</td>
</tr>
<tr>
<td>Dental therapist (optional)</td>
<td>1</td>
</tr>
<tr>
<td>Professional /clinical Nurse</td>
<td>1</td>
</tr>
<tr>
<td>Cleaner</td>
<td>1</td>
</tr>
<tr>
<td>Receptionist</td>
<td>1</td>
</tr>
</tbody>
</table>

5.1.3.3 The number and type of technical staff shall be determined by the volume and type of work carried out (Workload Analysis).

5.1.4 **Products**

5.1.4.1 The dental clinic shall have the following equipment and instruments:

a. The dental unit(s)
   - Air-water syringes
   - Operating light
   - Saliva ejector (oral evacuator system)
   - Dental Chair
   - Operator’s stool
   - Assistant stool (optional)

b. Instruments for examination
   - Dental mirror, Cotton pliers
   - Explorers
   - Periodontal probe (optional)

c. Instrument for filling treatment
   - Condenser
   - Excavator
• Burnisher (ball type, football type, interproximal type) (optional)
• Carve
• Trimmers (optional)
• Knife (optional)
• Amalgam carriers (optional)
• Light curing unit with composite materials
• Matrix retainer
• Glass slab
• Spatula
• Dappen dishes
• Mortar and pestle
• Dental films (Periapical, occlusal & panoramic view (if necessary)
• Local anaesthesia (topical, anaesthetic capsule with & without adrenalin)
• Matrix band (metallic & celluloid, different size for molar & bicuspid)
• Articulating paper
• Wedge
• Paper pad
• Dental floss

d. Plastic instruments for filling treatment

e. Materials & instruments to keep the area free from moistures & to improve visibility
   • Rubber dam equipment (optional)

f. Dental hand pieces with Rotating instruments
   • Low speed hand pieces
   • High speed hand pieces

g. Instruments and Materials for root canal treatment
   • Broach (smooth and barber type).
   • Files (Hedstrom files, K types files,)
   • Millimeter ruler (endo block)
   • Reamer
   • Gates Glidden drills (optional)
   • Spreaders (optional)
   • Endodontic measuring Gauge (optional)
   • Rotary endodontic (optional)

h. Instrument for Oral Surgery
   • Surgical blade
   • Blade holder
   • Periosteal elevator
• Retractor
• Tongue depressor
• Surgical curate
• Mouth gage
• Cheek retractor (optional)
• Hemostats
• Tissue forceps
• Hammer
• Chisel
• Osteotome
• Micro motor with hand piece and burs
• Surgical burs
• Rongour forceps
• Bone file
• Needle holder
• Stitch scissors
• Arch bar and wire
• Wire cutter
• Wire twister
• Ligature scissors
• Surgical scissors
• Local anesthetic equipment (metal anesthesia syringe)
• Root elevators

i. Forceps for Dental Extractions (Deciduous teeth)
   • Maxillary forceps for anterior and posterior teeth extraction:
     o Incisor and canine teeth forceps
     o Molar teeth forceps (right and left)
     o Universal forceps for molar
   • Mandibular forceps for anterior & posterior teeth extraction
     o Incisors and canine forceps
     o Molar forceps

j. Forceps for Dental Extractions (Permanent teeth)
   • Maxillary Forceps for anterior & posterior teeth extraction
     o Incisor and canine teeth forceps
     o Premolar teeth forceps
     o Molar teeth forceps (Left and right)
     o Upper wisdom teeth forceps
     o Upper root forceps
   • Mandibular forceps for posterior teeth:
     o Incisor and canine teeth forceps
     o Premolar teeth forceps
     o Molar teeth forceps
o Lower wisdom teeth forceps
o Lower root forceps

k. Dental elevator (straight, curved, left and right, crier)

l. Periodontal instruments
   • Ultrasonic Scaler
   • Manual scaler
   • Prodental probe (optional)
   • Brushes (prophylaxis type)
   • Polishing pastes
   • Spatula (various sizes and shapes metallic, plastic)

m. Prostodontics basic instruments (fixed prostodontics)
   • Core post
   • Retainer pins
   • Retainer cord
   • Retainer cord pliers
   • Cement spatula
   • Woden bile sticks
   • Shade guide
   • Impression tray
   • Alginate
   • Dental cements (models)
   • Temporary band cements
   • Reber dams, puncher
   • Crown remover
   • Trays-(perforated, rim lock, acrylic, metallic, different sizes, for the upper & lower jaws)
   • Finishing disc (various sizes and grits)
   • Abrasive stones and disc (green, white)
   • Rubber disc with abrasives
   • Rubber bowl
   • Sets of performed temporary stainless steel crown
   • Sets or preformed anatomical plastic crown of polycarbonate resin
   • Sand paper disc
   • Spatula (various sizes and shapes metallic, plastic)
   • Kit for friction lock retention pin
n. Orthodontics instrument*(optional)*

- Band removing pliers
- Band pusher
- Band adapter
- How pliers /utility pliers (straight and curved)
- Bird-beak pliers
- Counting  ball pliers
- Bracket  teeser holder
- Three -prong pliers
- Weingart  utility pliers
- Tweed  loop pliers
- Arch  bending pliers
  - Distal -end cutting pliers
  - Coons  ligature Turing pliers
  - Elastic  separating pliers
  - Ligature  director
  - Pin  &ligature cutter
  - Distal end cutler
  - Posterior  band removing pliers
  - Wire bending pliers
  - Lingual arch forming pliers
  - Loop pliers
  - Clasp bending pliers
  - TP pliers (110,130)
  - Assorted orthodontics band
  - Preformed edgewise arch wires/
  - Orthodontic (molar) bands (bracket gulge)
  - Orthodontic arch wire
    - *(Niti 0.012, 0.14, 0.16 16x22, 17x23, rectangular
    - stainless steel (s.s.)
    - reverse wire
  - Orthodontics bracket
  - Orthodontic trays
  - Elastic  models chains
  - Ligature  wires
  - Arch  wires
  - Mathieu  needle holder
  - Band  seater/ plugger with sculer
o. Basic Dental Laboratory Equipments (optional)

p. Equipment for Radiology Department
   • Dental X-ray unit (periapical)
   • Panoramic radiography (optional)
   • View box for radiography (Negatoscope) (optional)
   • Film processing (if necessary, not applicable for digital)
   • Lead Aprone

q. Equipment used for amalgam restoration (optional)
   • Amalgam mixing machine (Amalgamatory)

r. Different operatory cabinets; mobile cabinets and/or Fixed cabinet, Drum, kidney dish

s. Thermometer, measuring tape (optional)

t. BP apparatus / sphygmomanometer with stethoscope,

u. Air compressor

v. Other rotating instruments (optional):
   • Mandrel (straight and latch type)
   • Carborundum, Silica, Crocus, discs and stones

w. Equipments for sterilization
   • Super heated steam under pressure (Autoclave)
   • Dry heat sterilization (Oven)
   • Ultrasonic cleaner system (Optional)
   • Different pans use for disinfections & sterilization of instruments
   • Test strips

5.1.4.2 Consumable materials for root canal treatment

   a) Paper points
   b) Gutta percha points (From 1 to 6 and from 7 to 12)
c) Endodontic kits
d) Rotatory cutting instruments:
e) Burs (carbide, diamonds, plain steel, carborundum for slow hand piece & high hand piece types
f) Round burs (Number ½-11)
g) Pear- shape burs (230-232)
h) Inverted cone burs (31 ½-44)
i) Taper fissure burs (169-171 plain, 699-703)
j) Round- end
k) Fissure burs
l) Flat-end fissure burs (957-959)
m) Cylinder burs
n) Wheel burs (11 ½ -16)
o) End-cutting burs
p) Drills for pin retention
q) Flames burs (242-246)
r) Straight fissure (55 ½-62 plain, 556-563 dentate)
s) Composites burs
t) Bud Burs (44 ½ -51)
u) Oval burs (218-221)
v) Cone burs (22 ½ -33)

5.1.4.3 Other consumables (analgesics, disposable syringe, Local anesthesia (Spray, Dental syringe, Lidocaine multi-dose with/without adrenalin, or Cartridge with & without adrenalin) & gloves etc)

5.1.4.4 The clinic shall have the following supplies and equipment needed for infection prevention and control practice.

a. Waste management equipment and supplies:
   - Incinerator (mobile)
   - Ash pit
   - Garbage bins
   - Plastic garbage bags (optional)
   - Safety boxes

b. Cleaning appliances
   - Laundry appliances
   - Sink
   - Washing basin
   - (for decontamination of linens)
   - Drying rack/line
• Irons

c. Personal Protective Equipment

• Heavy duty glove
• Surgical glove
5.2 Housekeeping & Maintenance Services

5.2.1 Practices

5.2.1.1 The housekeeping service shall have the following activities.

   a. Basic cleaning such as dusting, sweeping, polishing and washing
   b. Special cleaning of
      • Different types of floors
      • Wall & ceiling
      • Doors & windows
      • Furniture & fixtures
      • Venetian blinds
   c. Cleaning and maintenance of toilet.
   d. Water treatment, filtering & purification.

5.2.1.2 Maintain an adequate supply of clean white coat and gowns at all times.

5.2.1.3 In the housekeeping service, the types and sources of offensive odors shall be identified, controlled and removed immediately.

5.2.1.4 Collection, transportation and disposal of specialty clinic wastes shall be supervised and controlled.

5.2.1.5 The safety of fire, electrical and natural hazards in the risk areas in the specialty clinic shall be supervised and controlled and shall work closely with specialty clinic fire brigade and safety committee.

5.2.1.6 The designee shall identify, supervise and organize the control and eradication of pests, rodents and animal nuisance in the specialty clinic.

5.2.1.7 The housekeeping staffs shall create pleasant environment to patients, staffs and visitors.

5.2.1.8 The housekeeping staffs shall ensure proper lighting and ventilation in different specialty clinic areas.

5.2.1.9 Regular surveillance of overhead and underground tank, proper cover, regular chlorination and cleaning shall be undertaken.

5.2.1.10 The infection control measures shall be carried out in accordance with the specialty clinic infection prevention standard.

5.2.1.11 There shall be reserve electrical generator for power supply for continuous 24 hours.
5.2.1.12 Potable water and electrical services shall be available 24 hours a day and 365 days a year through regular or alternate sources.

5.2.1.13 There shall be a plant safety maintenance organization as described below:
   a. A safety committee that develops a comprehensive clinic-wide safety program and reviewed.
   b. A mechanism to report all incidents, injuries and safety hazards to the safety committee.
   c. The safety committee shall review all reports and be responsible for ensuring that all reports are referred appropriately and follow-up action is documented.

5.2.1.14 Facility maintenance services
   a. The building maintenance service shall have written policies and procedures that are reviewed for routine maintenance, preventive maintenance and renovation maintenance.
   b. The standby emergency generator shall be checked weekly, tested under load monthly, and serviced in accordance with accepted engineering practices.
   c. Floors, ceilings, and walls shall be free of cracks and holes, discoloration, residue build-up, water stains, and other signs of disrepair.
   d. Routine inspections of elevators shall be conducted.

5.2.1.15 Construction and renovation
   a. Whenever construction and renovation projects are planned in and around a health care facility, a risk assessment shall be conducted to determine the impact of the project on patient areas, personnel, and mechanical systems.
   b. The infection control program shall review areas of potential risk and populations at risk.

5.2.1.16 There shall be written protocols and procedures for specialty clinic equipment maintenance including:
   a. Plan for equipment maintenance (both preventive and curative), replacements, upgrades, and new equipments
   b. Safe disposal procedures
   c. An effective tracking system to monitor equipment maintenance activity.
   d. A monitoring method that ensures diagnostic equipment operates with predicted specificity and sensitivity.

5.2.1.17 The maintenance personnel including the management of the clinic shall take basic trainings on the following issues and this shall be documented.
   a. Building fabrics and utilities
   b. Building services and economics
c. Planning maintenance demand

d. Preventive and routine maintenance practice

e. Maintenance with regard to IP and hygiene

5.2.1.18 Fire and emergency preparedness

a. The clinic shall comply with the National Fire Protection standard

b. All employees, including part-time employees shall be trained in procedures to be followed in the event of a fire and instructed in the use of fire-fighting equipment and evacuation from the building as part of their initial orientation and shall receive printed instructions on procedures and at least annually thereafter.

c. A written evacuation diagram specific to the unit that includes evacuation procedure, location of fire exits, alarm boxes, and fire extinguishers shall be posted conspicuously on a wall.

d. Fire extinguishers shall be visually inspected at least monthly; fully inspected at least annually, recharged, repaired and hydro-tested as required by manufacturer's instructions; and labeled with the date of the last inspection.

e. Fire detectors, alarm systems, and fire suppression systems shall be inspected and tested at least twice a year by a certified testing agency. Written reports of the last inspections shall be kept on file.

f. There shall be a comprehensive, current, written preventive maintenance program for fire detectors, alarm systems, and fire suppression systems that includes regular visual inspection. This program shall be documented.

5.2.1.19 Housekeeping equipment or supplies used for cleaning in contaminated areas shall not be used in any other area of the clinic before it has been properly cleaned and sterilized.

5.2.1.20 All areas of the clinic, including the building and grounds, shall be kept clean and orderly.

5.2.1.21 There shall be frequent cleaning of floors, walls, woodwork and windows.

5.2.1.22 The premises shall be kept free of rodent and insect infestations.

5.2.1.23 Accumulated waste material and rubbish shall be removed at frequent intervals.

5.2.1.24 No flammable cleaning agents or other flammable liquids or gases shall be stored in any janitor's closet or other area of the clinic except in a properly fire rated and properly ventilated storage area specifically designed for such storage.

5.2.1.25 If the clinic does not have its own housekeeping and maintenance services; it may have a contract agreement with external organizations.

5.2.1.26 If the clinic has given the housekeeping and maintenance services to a contractor, the contractual agreement shall be filed and made accessible in the clinic premises. In such cases the clinic shall
make sure that the standards mentioned for housekeeping and maintenance are adhered by the contractor.

5.2.2 Premises
5.2.2.1 There shall be separate space provided for the storage of housekeeping equipment and supplies.
5.2.2.2 Office shall be available for the maintenance and the housekeeper.
5.2.2.3 Adequate space shall be available for janitor’s closets and cleaning equipment & supplies.
5.2.2.4 Exits, stairways, doors and corridors shall be kept free of obstructions.
5.2.2.5 The clinic shall have an alternate emergency power supply. If such emergency power supply is a diesel emergency power generator, there shall be enough fuel to maintain power for at least 24 hours.

5.2.3 Professionals
5.2.3.1 The housekeeping and maintenance personnel shall take basic trainings on the following issues and this shall be documented in their personal profile.
   a. Basic principles of sanitation and peculiarity to clinic environment.
   b. Basic principles of personal hygiene
   c. Basic knowledge about different detergent and disinfectants
   d. Basic knowledge about cleaning equipments operation techniques and their maintenance.
   e. Different processes of water treatment & purification, removing bacteria.
   f. Basic principles of ventilation, composition of air, air flow, humidity and temperature.
   g. Common types of odors and their sources of origin, identification and control.
   h. Removal and control technique of different types of odors.
   i. Various equipments and materials used for odor control operation.
   j. Medical waste, source and generation of waste
   k. Hazards of medical waste to population and community.
   l. Principles of collection of different types of medical wastes
   m. Operational procedures of equipments
   n. Safety measures in operation
   o. Clinic lay out, configuration work, flow of men, material and equipment in different areas. Air, water, noise, pollution, causes of pollution and their control and prevention.

5.2.3.2 In summary, if the service is not outsourced, the clinic shall have
   a. Designated personnel for housekeeping,
b. General maintenance personnel (electrician, plumber, painter, building maintenance technician and

   c. Biomedical equipment maintenance technician.

5.2.4 Products

5.2.4.1 The clinic shall have the following tools, equipment & materials for housekeeping services.
a. Reserve electrical generator  
b. Floor wiping brush  
c. Ceiling brush  
d. Glass cleaning / wiping brush.  
e. Dustbins paddles  
f. Plastic Bucket  
g. Gum boots  
h. Heavy duty glove  
i. Gown, Masks  
j. Cleaning material  
k. Deodorants & disinfectant  
l. Insecticides & rodenticides
Bibliography

The latest editions of the following laws, regulations, directives and guidelines shall be taken as part and parcel of this Ethiopian Standard.

1. Ethiopian Food, medicine and Healthcare Administration and Control Proclamation No. 661/2009
2. Ethiopian Food, Medicine and Healthcare Administration and Control Regulation No. 189/2010
5. Commercial Code of Ethiopia
6. Criminal Code of Ethiopia