DRAFT EAST AFRICAN STANDARD

Petroleum facilities — Retail and consumer outlets — Classification

EAST AFRICAN COMMUNITY
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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

EAS was prepared by Technical Committee EASC/TC.
Petroleum facilities — Retail and consumer outlets — Classification

1 Scope

This Draft East Africa Standard specifies the classification requirements for petroleum fuel outlets both retail and consumer sites based on risk and functionality.

2 Normative references

The following referenced documents are indispensable for the application of this East Africa Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

DEAS 977: The petroleum industry, the installation of underground storage tanks, pumps/dispensers and pipe work at service stations and consumer installations — Code of practice

3 Definitions

For the purposes of this document, the following definitions shall apply:

3.1 approving authority
the relevant competent authority in the respective Partner States

3.4 capacity
total water capacity of the storage vessel

3.6 risk
likelihood of a storage vessel being exposed to damage, radiant heat and similar dangers
NOTE Risk is dependent of the capacity of a storage vessel and represents an evaluation of the effect that external circumstances could have upon the storage vessel.

3.7 Retailer
A licenced fuel filling/service station operator
3.7 Filling station
a facility that retails fuel, lubricants and motor vehicle accessories

3.8 Service station
a filling station that offers other related services like minor motor repairs, car wash, convenience store, eatery etc

4 Classification of petroleum dispensing facilities both retail and consumer outlets

4.1 Petroleum dispensing facilities shall be classified into four tiers and one special group as follows:

a) Tier 1;
b) Tier 2;
c) Tier 3;
d) Tier 4; and
e) Special category.

4.2 Requirements for dispensing facilities (stations)

4.2.1 General requirements

4.2.1 All the facilities shall have canopy covers except movable/potable facilities. The canopy shall have a minimum head clearance of 4.6 m and outside extension of minimum 1.5 m on all sides

4.2.2 Provision for Washroom facilities.

4.2.3 provision for lighting.

4.2.4 Price boards, signs, company logos shall be located in designated areas and shall meet the relevant legislations in the jurisdiction of the Partner States

4.2.5 Appropriate building setbacks, way leaves, right of ways and acceleration and deceleration lanes shall be observed in accordance with the requirements of the relevant legislations in the jurisdiction of the Partner States

4.2.6 Provision for drainage systems connected to interceptors.

4.2 Specific requirements

4.1 Tier 1 — Dispensing facility (filling station)
This is a filling station that shall meet the following requirements.

4.1.1 Land size

The minimum land size shall be 400 m² as long as it meets the relevant legislations in the jurisdiction of the Partner States

4.1.2 Station frontage

The minimum dimensions for station frontage shall be 22 m with an allowance of 6 m for entrance and 6 m for exit.

The station shall have optimal depth though dependent on the frontage and area ie Area divide by the frontage measured from the end of the road reserve as shown in Figure 1.

4.1.3 Station components

The station shall have:

i) A single tank for each of the products shall have a maximum capacity of 20 m³.

ii) Auxiliary services such as car wash and service bay shall not be allowed in this service station.

iii) An office at the discretion of the owner, as long as it does not reduce safety distances available

iv) Appropriate color codes and warning signs used

v) Appropriate provision of for fire fighting equipment
4.2 Tier 2 — Dispensing facility (service station)

This type of retail outlet shall fulfill the following requirements:

4.2.1 Land size

The minimum land size shall be 900 m² as long as it meets the relevant legislations in the jurisdiction of the Partner States.

4.2.2 Station frontage

The minimum dimensions for station frontage shall be 32 m with an allowance of 6 m for entrance and 6 m for exit.

The station shall have optimal depth though dependent on the frontage and area ie Area divide by the frontage measured from the end of the road reserve as shown in Figure 2.

4.2.3 Station components

4.2.3.1 The station shall have:
i) Each tank shall have a maximum capacity of 85 m$^3$. A combined maximum storage capacity for all the products shall be 260 m$^3$.

ii) Auxiliary services such as car wash and/or service bays.

iii) An office of maximum 60 m$^2$ of foot space.

iv) NOTE The office block may contain a convenience store but not a cooking facility

v) Appropriate color codes and warning signs used

vi) Appropriate provision for fire fighting equipment

4.2.3.2 Biofuels may be offered for sale, in which case any one of the allowed number of tanks shall be constructed to the standards befitting storage and handling of biofuels.

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**Figure 2 — Tier 2, Minimum dimensions for station depth and frontage**

4.3 Tier 3 — Dispensing facility (service station)

This type of retail outlet shall fulfill the following requirements:

4.3.1 Land size

The minimum land size shall be 1500 m$^2$ as long as it meets the relevant legislations in the jurisdiction of the Partner States.
4.3.2 Station frontage

The minimum dimensions for station frontage shall be 32 m with an allowance of 6 m for entrance and 6 m for exit.

The station shall have optimal depth though dependent on the frontage and area ie Area divide by the frontage measured from the end of the road reserve as shown in Figure 3.

4.3.3 Station components

4.3.3.1 The service station shall have:

a) Each tank shall have a maximum capacity of 85 m$^3$
b) A combined maximum storage capacity for all the products shall be 260 m$^3$
c) Auxiliary services such as car wash and service bays.
d) Appropriate color codes and warning signs used
e) Appropriate provision for fire-fighting equipment
f) An office of maximum 120 m$^2$ of foot space.
g) The office block may contain a convenience store, eating facility, ATM lobby and a maximum of 3 floors of a multilevel office block.

NOTE In cases where there is a multilevel building, adequate provisions for emergency fire escape and minimization of noise and air pollution inside the buildings should be provided.

4.3.3.2 This facility shall not contain auto gas due to the nature of activities incorporated.

4.3.3.3 Biofuels may be offered for sale, in which case any one of the allowed number of tanks shall be constructed to the standards befitting storage and handling of biofuels.
4.4 Tier 4 — Dispensing facility (service station)

The service station shall fulfill the following requirements:

4.4.1 Land size

The minimum land size shall be 2200 m$^2$.

4.4.2 Station frontage

4.4.2.1 The minimum dimensions for station frontage shall be 32 m with an allowance of 6 m for entrance and 6 m for exit.

4.4.2.2 The station shall have optimal depth though dependent on the frontage and area ie Area divide by the frontage measured from the end of the road reserve as shown in Figure 4.

4.4.3 Station components

4.4.3.1 The station shall have:

i) Each tank shall have a maximum capacity of 85 m$^3$
ii) A combined maximum storage capacity for all the products shall be 260 m$^3$.

iii) LPG storage tanks shall be of maximum water capacity of 9000 litres (4.5 tonnes of LPG).

iv) LPG storage tanks shall be mounded or underground and shall be installed in accordance to EAS 924-2. Above ground and skid mounted tanks for LPG could be installed as long as they comply with EAS 924-2.

v) LPG offloading points with a minimum area of 6m$^2$ and located 5 m radius away from pedestrian and vehicular movements.

vi) Appropriate color codes and warning signs used.

vii) Appropriate provision for fire-fighting equipment.

viii) Auxiliary services such as car wash and service bays.

ix) An office of maximum 120 m$^2$ of foot space.

x) The office block may contain a convenience store, eating facility, ATM lobby and a maximum of 3 floors of a multilevel office block.

4.4.3.2 Biofuels may be offered for sale, in which case any one of the allowed number of tanks may be constructed to the standards befitting storage and handling of biofuel.
4.5 Specialized category

This type of outlet shall comprise the following:

a) Consumer sites of storage capacity less than 200 m$^3$.

b) Movable/portable outlets including containerized fuel stations.

4.5.1 Consumer sites (outlets)

4.5.2.1 General

This category shall comprise all fuel installations at consumer sites with storage capacity not exceeding 100 m$^3$.

4.5.2.2 Location

4.5.2.2.1 Any site chosen shall be designed so as to minimize the risks of any unauthorized person to be at or near the dispensing pump. Petroleum dispensing pumps shall be sited away from any places of public assembly where there is large number of people, such as town centres, neighbourhood centres, important buildings and key installations.
4.5.2.2 Safety distances, storage and spill containment shall be provided in accordance with DEAS 1.

4.5.2.3 Neither the dispenser nor the storage tanks shall be placed inside a house or non-ventilated enclosure.

4.5.2.3 Facility for consumer sites

The station shall have:

i) Any number of nozzles dispensing any of/or all the products automotive gasoil, premium motor spirit, illuminating kerosene.

ii) Underground tanks or well insulated and appropriately contained above ground storage tanks.

iii) A total combined storage capacity not exceeding 100m$^3$.

iv) Appropriate colour codes and warning signs used.

v) Appropriate provision for fire fighting equipment.

4.5.2 Movable/portable outlets including containerized fuel stations

4.1.1 Land size

The minimum land size shall be 500 m$^2$.

4.5.3.1 General

This category shall comprise of all the moveable/ portable fuel outlets including the containerized fuel stations that are installed temporarily to provide refueling services in remote locations.

4.5.3.2 Location

a) .

b) Any site chosen should shall be sufficiently spacious for it to be designed so as to minimize the risks of any unauthorized person to be at or near the dispensing pump. Petroleum dispensing pumps shall be sited away from any places of public assembly where there is large number of people, such as town centres, neighbourhood centres, important buildings and key installations.

c) Safety distances, storage and spill containment shall be provided in accordance to with DEAS 976.

d) Storage and spill containment shall be provided as per DEAS 976.

4.5.3.3 The station shall have:

a) A combined total of between two to twelve nozzles offering for sale automotive gasoil, premium motor spirit, illuminating kerosene.

b) Well insulated and appropriately contained above ground storage tanks.
c) A total combined storage capacity not exceeding 40 m$^3$.

d) Appropriate colour codes and warning signs used.

e) Proper piping.

f) Provision for fire-fighting equipment which comply with relevant standards.

g) Appropriate lighting

4.5.3.5 This facility shall not contain auto gas.

4.5.3.6 The station shall be located in remote areas.