**KENYA BUREAU OF STANDARDS**

**ADOPTION PROPOSAL**

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| **Document Type:** | **Adoption proposal** | |
| **Dates:** | Circulation date | Closing date |
| 25-03-2019 | 25-04-2019 |
| **TC Secretary** | **This form shall be filled, signed and returned to Kenya Bureau of Standards for the attention of SAMUEL KIBOGO (kibogos@kebs.org)** | |

The Kenya Bureau of Standards intends to adopt the International Standards as detailed here below:

1. **Number ISO 45001:2018**

**Titl**e: **Occupational health and safety management systems — Requirements with guidance for use**

**Scope:**

This document specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

This document is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities.

This document helps an organization to achieve the intended outcomes of its OH&S management system. Consistent with the organization’s OH&S policy, the intended outcomes of an OH&S management system include:

a) continual improvement of OH&S performance;

b) fulfilment of legal requirements and other requirements;

c) achievement of OH&S objectives.

This document is applicable to any organization regardless of its size, type and activities. It is applicable to the OH&S risks under the organization’s control, taking into account factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties.

This document does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system.

This document enables an organization, through its OH&S management system, to integrate other aspects of health and safety, such as worker wellness/wellbeing.

This document does not address issues such as product safety, property damage or environmental impacts, beyond the risks to workers and other relevant interested parties.

This document can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization’s OH&S management system and fulfilled without exclusion.

1. **Number: ISO 17776:2016**

**Title**: **Petroleum and natural gas industries — Offshore production installations — Major accident hazard management during the design of new installations**

**Scope:**

This document describes processes for managing major accident (MA) hazards during the design of offshore oil and gas production installations. It provides requirements and guidance on the development of strategies both to prevent the occurrence of MAs and to limit the possible consequences. It also contains some requirements and guidance on managing MA hazards in operation.

This document is applicable to the design of

— fixed offshore structures, and

— floating systems for production, storage and offloading for the petroleum and natural gas industries.

The scope includes all credible MA hazards with the potential to have a material effect on people, the environment and assets.

This document is intended for the larger projects undertaken to develop new offshore installations. However, the principles are also applicable to small or simple projects or design changes to existing facilities and can also be relevant to onshore production facilities.

Mobile offshore units as defined in this document are excluded, although many of the principles can be used as guidance. The design of subsea facilities is also excluded, though the effects of mobile and subsea facilities are considered if they can lead to major accidents that affect an offshore installation. This document does not cover the construction, commissioning, abandonment or security risks associated with offshore installations.

The decision to apply the requirements and guidance of this document, in full or in part, is intended to be based on an assessment of the likelihood and possible consequences of MA hazards.

1. **Number ISO 13702:2015**

Title**: Petroleum and natural gas industries — Control and mitigation of fires and explosions on offshore production installations —Requirements and guidelines**

**Scope:**

This International Standard describes the objectives and functional requirements for the control and mitigation of fires and explosions on offshore installations used for the development of hydrocarbon resources.

This International Standard is applicable to the following:

— fixed offshore structures;

— floating systems for production, storage, and offloading;

— petroleum and natural gas industries.

Mobile offshore units as defined in this International Standard and subsea installations are excluded, although many of the principles contained in this International Standard can be used as guidance. This International Standard is based on an approach where the selection of control and mitigation measures for fires and explosions is determined by an evaluation of hazards on the offshore installation. The methodologies employed in this assessment and the resultant recommendations will differ depending on the complexity of the production process and facilities, type of facility (i.e. open or enclosed), manning levels, and environmental conditions associated with the area of operation.

NOTE: Statutory requirements, rules, and regulations can, in addition, be applicable for the individual offshore installation concerned.

1. **Number ISO 15544:2000/Amd.1:2009 (E)**

**Title: Petroleum and natural gas industries —Offshore production installations —Requirements and guidelines for emergency response**

**Scope:**

This International Standard describes objectives, functional requirements and guidelines for emergency response (ER) measures on installations used for the development of offshore hydrocarbon resources. It is applicable to fixed offshore structures or floating production, storage and off-take systems.

NOTE: For mobile offshore units, the ER plans developed in conformance with the requirements and recommendations of the International Maritime Organization (IMO) are generally adequate for the normal, independent operation of the unit in most locations. The following aspects of ER planning are generally not addressed by IMO and should be specially considered:

* area evacuation, e.g. precautionary evacuation in areas of tropical revolving storms;
* combined operations wherein an integrated command and ER system should be developed;
* arctic operations;
* uncontrolled flow from a well.

1. **Number ISO 13857 2000**

**Title: Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs**

**Scope:**

This International Standard establishes values for safety distances in both industrial and non-industrial environments to prevent machinery hazard zones being reached. The safety distances are appropriate for protective structures. It also gives information about distances to impede free access by the lower limbs.

This International Standard covers people of 14 years and older (the 5th percentile stature of 14 year olds is approximately 1 400 mm). In addition, for upper limbs only, it provides information for children older than 3 years (5th percentile stature of 3 year olds is approximately 900 mm) where reaching through openings needs to be addressed.

NOTE 1: Data for preventing lower limb access for children is not considered.

The distances apply when adequate safety can be achieved by distance alone. Because safety distances depend on size, there will be some people of extreme dimensions who will be able to reach hazard zones even when the requirements of this International Standard are complied with.

NOTE 2: These safety distances will not provide sufficient protection against certain hazards, for example, radiation and emission of substances. For such hazards, additional or other measures need to be taken.

The clauses of the International Standard covering lower limbs apply when access by the upper limbs is not foreseeable according to the risk assessment.

The safety distances are intended to protect those persons trying to reach hazard zones under the conditions specified.

NOTE 3: This International Standard is not intended to provide measures against reaching a hazard zone by climbing over.

1. **Number ISO 10418:2003**

**Title: Petroleum and natural gas industries —Offshore production installations —Basic surface process safety systems**

**Scope:**

This International Standard provides objectives, functional requirements and guidelines for techniques for the analysis, design and testing of surface process safety systems for offshore installations for the recovery of hydrocarbon resources. The basic concepts associated with the analysis and design of a process safety system for an offshore oil and gas production facility are described, together with examples of the application to typical (simple) process components.

This International Standard is applicable to fixed offshore structures; floating production, storage and off-take systems; for the petroleum and natural gas industries.

This International Standard is not applicable to mobile offshore units and subsea installations, although many of the principles contained in it may be used as guidance.

1. **Number ISO 13577-1:2016**

**Title: Industrial furnaces and associated processing equipment — Safety —**Part 1: **General requirements**

**Scope:**

This document specifies the general safety requirements common to industrial furnaces and associated processing equipment (TPE).

This document deals with the significant hazards, hazardous situations or hazardous events relevant to TPE, as listed in Annex A, when TPE is used as intended and also under conditions of misuse that are reasonably foreseeable by the manufacturer.

Annex B provides a list of common industrial furnaces and associated processing equipment.

This document specifies the requirements intended to be met by the manufacturer to ensure the safety of persons and property during commissioning, start-up, operation, shut-down, maintenance periods and dismantling, as well as in the event of foreseeable faults or malfunctions that can occur in the equipment.

These general safety requirements apply to all TPE, unless an exception is given in other parts of ISO 13577 dealing with specific equipment. The provisions of other parts of ISO 13577 that directly apply to specific types of TPE take precedence over the provisions of this document.

This document is not applicable to blast furnaces, converters (in steel plants), boilers or equipment not covered under ISO 12100.

1. **ISO 13577-2:2016**

**Title: Industrial furnaces and associated processing equipment — Safety —**Part 2: **Combustion and fuel handling systems**

**Scope:**

This part of ISO 13577 specifies the safety requirements for combustion and fuel handling systems that are part of industrial furnaces and associated processing equipment (TPE).

This part of ISO 13577 deals with significant hazards, hazardous situations and events relevant to combustion and fuel handling systems as listed in Annex A, when used as intended and under the conditions foreseen by the manufacturer.

This part of ISO 13577 covers:

— fuel pipework downstream of and including the manual isolating valve;

— combustion air supply (including oxygen and oxygen enriched combustion air) and flue gas system;

— burner(s), burner system and ignition device;

— functional requirements for safety related control system.

This part of ISO 13577 applies to any oxidation with air or other gases containing free oxygen of gaseous and liquid fuels or any combustion of them to release thermal energy in TPE.

For thermal or catalytic post combustion and waste incineration, this part of ISO 13577 applies only to auxiliary burners designed to start-up and/or support the process.

The pressure hazard of the piping and components covered by this part of ISO 13577 is within the maximum pressure/size relationship of category I.

This part of ISO 13577 also gives the necessary requirements regarding information for use.

This part of ISO 13577 does not cover hazards from heating generated by electricity.

This part of ISO 13577 does not deal with the hazards created by the release of flammable substances from the products processed in the TPE.

This part of ISO 13577 is not applicable to combustion and fuel handling systems:

— of welding machines;

— up-stream of the TPE manual isolating valve.

This part of ISO 13577 is not applicable to electrical cabling and power cabling upstream of the TPE control panel/protective system.

We are therefore seeking views from potential users in respect of the same. The Standard is available at the Kenya Bureau of Standards Information Centre. Please tick and fill your preference of the listed option. (If the spaces provided are not enough, please attach a separate sheet of paper).

Adoption acceptable as presented

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Adoption proposal not acceptable because of the reason(s) below

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Our Recommendations are as follows

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Name and Signature (of respondent):

Position (of respondent): ……………………………………………………………………..…

On behalf of:…………………………………………………..(Name of organization)

Date……………………………………………………………..

**NOTE:** Absence of any reply or comments shall be deemed to be an acceptance of the proposal for adoption and **shall constitute an approval vote**.