- The applicant shall pay the prescribed application fee equivalent to KShs 5,000 through NEMA's Revenue Account. A NEMA official receipt will be issued to the applicant on evidence of payment such as bank deposit slips or copy of a banker's cheque.
- The applicant shall return the duly filled forms and documents to the District Environment Officer who will then forward the form to NEMA Headquarters for processing
- The application will then be reviewed within 21 working days and an approval for licensing will be given with relevant conditions or a decline stating the reasons
- . Upon approval, a license fee shall be paid as follows:
  - Application fee of KShs 5,000
  - Licensing fees of KShs 100,000



Upon payment, a license shall be issued within 30 working days and will be liable for renewal every year based on evidence of adherence to set conditions.

Charges

#### **Environmental Monitoring and Compliance**

NEMA's Environmental Inspectors will undertake regular monitoring of the facilities to ensure compliance with the Regulations. In the event of violation of conditions in the licence, the Authority shall revoke the licence notwithstanding the official renewal date.

Such facilities shall cease to operate until the licensing conditions are fulfilled.

#### Offences and Penalties

EMCA 1999 identifies various environmental offences and states that any person who contravenes any part of the regulations commits an offence. The water quality regulations stipulates upon conviction by a court of law a fine not exceeding five hundred thousand Kenya Shillings (KShs 500, 000) in contravention to any part of the regulations. In addition to the above the court may give such other orders as provided for by the Act.



For more information contact
Director General
Popo Road, off Mombasa Road, P.O Box 67839-00200,
Natrobl, Kenya
Tel: 6005522/6001945/6008767/2101370
Fax: 254-02-6008997, Hotline: 6006041, Mobile No: 0724253398,
0728583829,0733013046,0735010237
e-mail:dgnema@nema.go.ke , website: www.nema.go.ke



National Environment Management Authority (NEMA)

# Water Quality Regulations, 2006

#### PETROLEUM SECTOR





Enhancing Quality Water for All







#### Introduction

Kenya's importation of oil comprises 30% refined and 70% crude. The crude oil is refined at Kenya Petroleum Refineries at Changamwe in Mombasa producing petroleum products. However, the distillation, processing and blending of crude oil results in the formation of petroleum residues in form of sludge and waste gas.

The petroleum by-products released into the environment undergo weathering processes, chemical oxidation and microbial degradation thus polluting the environment. Although weathering processes may not be detectable for years, inherent risks to human health and environment continue to manifest over time. Most petroleum based products have potential to cause cancer and the need to limit human exposure to the by-products. Although sludge is mainly used to process furnace oil, in Kenya there is no proper handling of the sludge thus polluting the environment. It is therefore important to manage the risks to human health and prevent contamination to soil, water systems and air by ensuring adequate facilities to manage petroleum by-products.

## Targeted Facilities

The targeted facilities include petrol stations, refineries, petroleum depots, garages and other hydrocarbons handling facilities.



### Obligations

- The petroleum sector is required by EMCA 1999 to conduct an EIA for proposed new facilities or expansion as well as EA for existing ones.
- The water quality regulations prohibits the discharge or application of pollutants into the aquatic environment unless such pollutant complies with the standards set out in annex 2 (third Schedule).

#### Standards

The following are the permitted water quality standards provided in the Third Schedule of the regulations, applicable to the petroleum sub-sector.

#### Table

### Permitted Water Quality Standard Parameters

No.	Parameter	Guide Value (Maximum allowable)
1	Biological Oxygen De- mand (BOD 5 days at 20 C)	30mg1
2	Total Suspended Solids (TSS)	30mg/l
3	pH	5.0-9.0 (marine) 6.5-8.5 (non-marine)
4	Faecal coliform (E.coli counts/100ml)	nil
5	Oil and grease	nil
6	Temperature of ambient temperature in C	±3oC
7	Colour in Hazen units	15
8	Total Petroleum Hydro- carbons (TPH)	Should be less than 500mg/kg
9	Phenols	0.001(mg/l)
10	Sulphide	0.1(mg/l)
11	Chemical Oxygen De- mand (COD)	50mg/1
12	Total Chromium	2
13	Polycyclic Aromatic Hydrocarbons (PAH)-	Indicate the level

Permitted Water Quality Standard Parameters No. Parameter Guide Value (Maximum allowable)

### Licensing Procedures

- All applicants shall obtain relevant application forms from the nearest NEMA office or download the same from the NEMA Website: www.nema.go.ke
- Fill forms indicating EIA or EA Reference Number and attach supporting documents such as site location, maps, sketch of facility/site In relation to water body indicating three sampling points. In addition the applicant must attach design plan of the treatment works, effluent analysis from NEMA accredited laboratories, company PIN Certificate and Certificate of incorporation.

