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KENYA

CHAPTER 11: KENYA

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12.1 Constitutional requirements for environmental protection in Kenya

The current Constitution of Kenya (i.e. the amendment gazetted in 2010) makes provision for an environmental right:

“Every person has the right to a clean and healthy environment, which includes the right:

(a) to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69 (see below); and

(b) to have obligations relating to the environment fulfilled under Article 70 (see below).”

Article 69 commits the Kenyan State to a comprehensive list of environmental conservation obligations including sustainable utilisation of natural resources, promotion of public participation in natural resource management and the establishment of EIA, monitoring and auditing systems. Article 69 also bestows a duty on Kenyan citizens to cooperate with organs of state to protect and conserve the environment. Significantly, Article 70 provides greater access to administrative justice where an environmental right has been violated. An applicant who seeks legal remedy to an environmental rights violation does not need to demonstrate that any person has incurred loss or suffered damage.

12.2 Institutional and administrative structure for EIA in Kenya

12.2.1 Ministry of Environment and Forestry

The mandate of the Ministry Environment and Forestry (MEF) is to protect, conserve and manage the environment and natural resources for socio-economic development. The MEF consists of three technical directorates namely: Environment, Forestry Conservation and Climate Change and five semi-autonomous government agencies as follows (see Figure 12.1):

- National Environment Management Authority (NEMA);
- Kenya Water Towers Agency (KWTA);
- Kenya Forest Service (KFS);
- Kenya Forest Research Institute (KEFRI);
- National Environment Trust Fund (NETFUND);

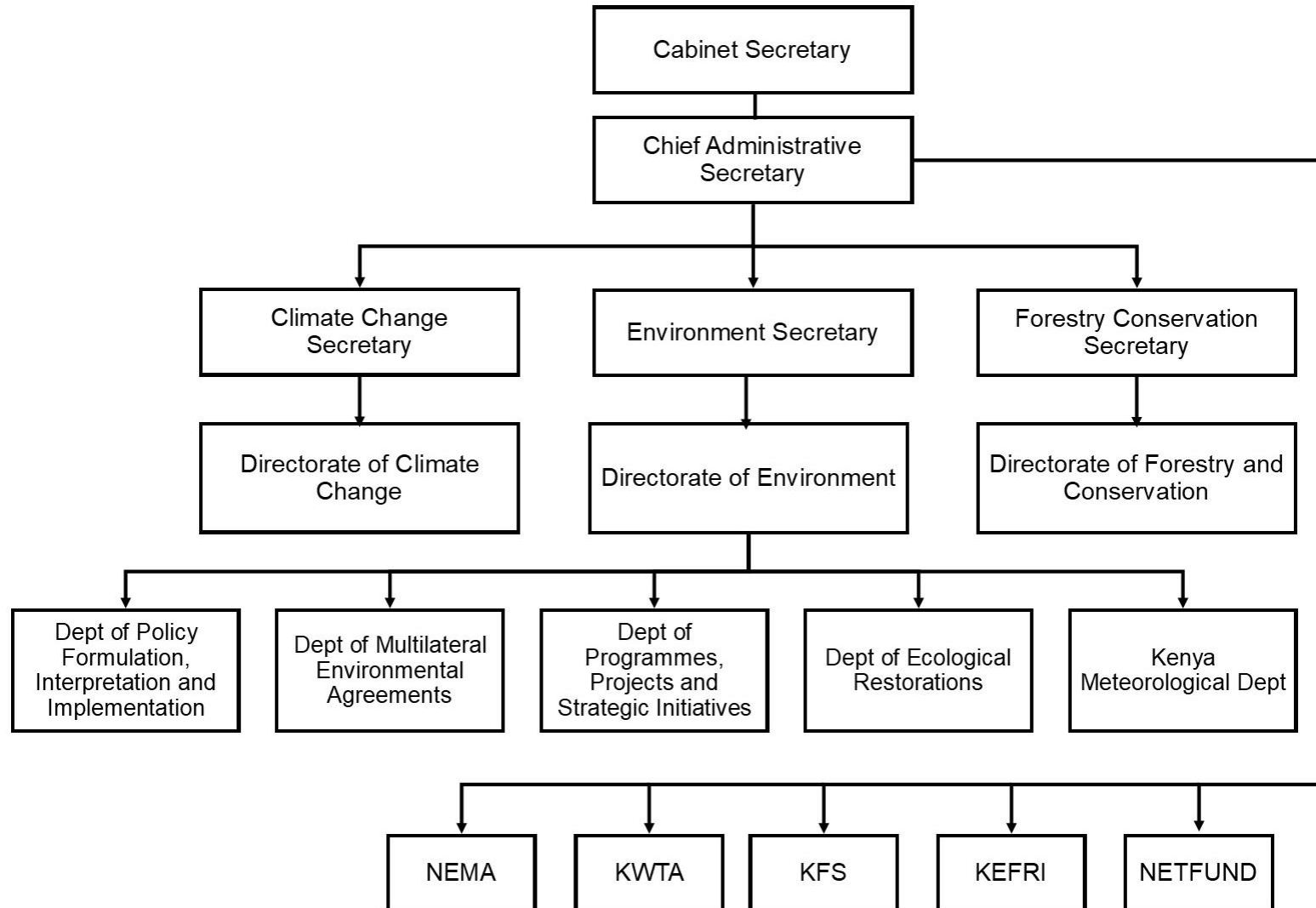


Figure 12.1: Organisational structure of the technical components of the Ministry of Environment and Forestry

12.2.2 Directorate of Environment

The Directorate of Environment provides policy guidance, coordination and advice on issues relating to the environment and related legal instruments, their interpretation and application. This directorate provides coordination between the MEF and various agencies (most notably the National Environment Management Authority (NEMA)) on environmental matters. The Directorate has five departments (see Figure 12.1 below).

12.2.3 National Environment Management Authority

The establishment of the National Environment Management Authority (NEMA) is provided for under the Environmental Management and Co-ordination Act (EMCA), No. 8 of 1999 as amended (2015). According to the EMCA, the Authority's core functions are among others:

- Review and issue applications for EIA (EIA) licences;
- Coordinate the various environmental management activities being undertaken by the lead agencies;
- Promote the integration of environmental considerations into development policies, plans, programmes and projects, with a view to ensuring the proper management and rational utilisation of environmental resources, on a sustainable yield basis, for the improvement of the quality of human life in Kenya;
- To take stock of the natural resources in Kenya and their utilisation and conservation.
- To establish and review land use guidelines;
- Examine land use patterns to determine their impact on the quality and quantity of natural resources;
- Advise the government on legislative and other measures for the management of the environment or the implementation of relevant international conventions, treaties and agreements;
- Advise the government on regional and international conventions, treaties and agreements to which Kenya should be a party and follow up the implementation of such agreements;
- Mobilise and monitor the use of financial and human resources for environmental management;
- Identify projects and programmes for which an environmental audit or environmental monitoring must be conducted under the EMCA;
- Initiate and evolve procedures and safeguards for the prevention of accidents, which may cause environmental degradation and involve remedial measures where accidents occur e.g. floods, landslides and oil spills;
- Monitor and assess activities, including activities being carried out by relevant lead agencies, in order to ensure that the environment is not degraded by such activities;
- Undertake, in cooperation with relevant lead agencies, programmes intended to enhance environmental education and public awareness, about the need for sound environmental management, as well as for enlisting public support and encouraging the effort made by other entities in that regard;

- Publish and disseminate manuals, codes or guidelines relating to environmental management, and prevention or abatement of environmental degradation;
- Render advice and technical support, where possible, to entities engaged in natural resources management and environmental protection, so as to enable them to carry out their responsibilities satisfactorily; and
- Prepare and issue an annual report on the State of Environment in Kenya and in this regard, may direct any lead agency to prepare and submit to it a report on the state of the sector of the environment under the administration of that lead agency.

12.2.4 National Environment Tribunal

Section 125 provides for the establishment of the National Environment Tribunal (hereafter the Tribunal). The Tribunal exists to preside over any appeals made against decisions or actions taken in terms of the EMCA (see s. 12.4.5).

12.2.5 Environmental Inspectors

Section 117 provides for the appointment of Environmental Inspectors, by the Director-General of the Authority. An Environmental Inspector may at any reasonable time enter any premises for the purpose of ensuring compliance with the EMCA.

12.3 Policy and legal framework for EIA in Kenya

12.3.1 National Environmental Policy

The National Environment Policy was published by the MEF in 2013. This policy was the product of a comprehensive stakeholder consultation process and sought to address the main environmental challenges identified during the period of drafting (i.e. 2007 to 2013) including climate change, as well as alignment with the constitutional changes made in 2010.

The goal of the policy is “*better quality of life for present and future generations through sustainable management and use of the environment and natural resources.*”

The objectives of the policy are as follows:

“(a) Provide a framework for an integrated approach to planning and sustainable management of Kenya’s environment and natural resources.

“(b) Strengthen the legal and institutional framework for good governance, effective coordination and management of the environment and natural resources.

“(c) Ensure sustainable management of the environment and natural resources, such as unique terrestrial and aquatic ecosystems, for national economic growth and improved livelihoods.

“(d) Promote and support research and capacity development as well as use of innovative environmental management tools such as incentives, disincentives, total economic valuation,

indicators of sustainable development, Strategic Environmental Assessments (SEAs), EIAs (EIAs), Environmental Audits (EA) and Payment for Environmental Services (PES).

(e) Promote and enhance cooperation, collaboration, synergy, partnerships and participation in the protection, conservation, sustainable management of the environment and natural resources.

(f) Ensure inclusion of cross-cutting and emerging issues such as poverty reduction, gender, disability, HIV & AIDS and other diseases in the management of the environment and natural resources.

(g) Promote domestication, coordination and maximisation of benefit from Strategic Multilateral Environmental Agreements (MEAs)."

12.3.2 National Climate Change Framework Policy

The MEF published the National Climate Change Framework Policy in 2016. The goal of the Policy is *"to enhance adaptive capacity and resilience to climate change, and promote low carbon development for the sustainable development of Kenya."* The objectives of the Policy are as follows:

- (i) "Establish and maintain an effective and efficient institutional framework to mainstream climate change responses across relevant sectors and into integrated planning, budgeting, decision-making and implementation, at both the national and county levels;*
- (ii) Reduce vulnerability to the impacts of climate change by building adaptive capacity, enhancing climate change resilience and strengthening capacities for disaster risk reduction;*
- (iii) Catalyse Kenya's transition to cleaner, lower emission and less carbon intensive development;*
- (iv) Incentivise private sector involvement in building climate change resilience and engaging in low carbon development opportunities;*
- (v) Facilitate widespread public awareness, participation, ownership and oversight of Kenya's climate change response efforts and Action Plans;*
- (vi) Provide a framework to mobilise resources for Kenya's climate change response and ensure effective and transparent utilisation of the resources;*
- (vii) Adopt intergenerational, special needs and gender mainstreaming approaches across all aspects of Kenya's climate change response;*
- (viii) Provide the policy framework to facilitate effective implementation of regularly updated and scientifically informed Climate Change Action Plans; and*
- (ix) Enhance research and use of science and technology in policy decisions and sustainable management of resources."*

The Kenya National Adaptation Plan 2015-2030 was published in the same year. The plan is in the process of being implemented.

12.3.3 Environmental Management and Co-Ordination Act

The Environmental Management and Co-Ordination Act (EMCA) No. 8 was promulgated in 1999 and amended in 2015. Part II of the EMCA lays out the general principles underpinning the Act, which include:

- A commitment to an environmental right for all Kenyan citizens, as provided for in the Constitution (see section 12.1 above);
- Access to the environment for recreational, educational, health, spiritual and cultural purposes;
- Commitment by every Kenyan citizen to cooperate with state organs to protect and conserve the environment;
- Provision of access to administrative justice as provided for in the Constitution (see section 12.1 above); and
- The High Court, when exercising its authority in terms of the EMCA, should be guided by the following principles:
 - Principle of public participation;
 - Cultural and social principle;
 - Principle of international co-operation;
 - Inter-generational and intra-generational equity;
 - Polluter pays principle; and
 - Precautionary principle.

The “environment” is defined as including “*the physical factors of the surroundings of human beings including land, water, atmosphere, climate, sound, odour, taste, the biological factors of animals and plants and the social factor of aesthetics and includes both the natural and the built environment*”. This definition in general terms recognises both social and biophysical elements of the environment. However, the biophysical environment is not recognised in its own right, but only as far as it “*surrounds*” humans, while the recognition of the social aspects of the environment are limited to aesthetics, which arguably excludes important aspects such as health, culture and economic concerns.

12.3.4 Regulations

The EMCA is implemented by the following regulations (see section 12.5 for a brief overview of each):

- Environmental (Impact Assessment and Audit) Regulations (hereafter the EIA Regulations), 2003 (Chapter 387);
- Environmental (Prevention of Pollution in Coastal Zone and other Segments of the Environment) Regulations, 2003 (Chapter 387);
- Environmental Management and Co-ordination (Fossil Fuel Emission Control) Regulations, 2006 (Chapter 387);
- Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, (L.N. No. 160 of 2006);

- Environmental Management and Co-ordination (Public Complaints Committee) Regulations, (L.N. No. 112 of 2012);
- Environmental Management and Co-ordination (Wetlands, River Banks, Lake Shores and Sea Shore Management) Regulations, 2009 (Chapter 387);
- Environmental Management (Lake Naivasha Management Plan) Order, 2004 (Chapter 387);
- Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, (L.N. No. 61 of 2009);
- The Environmental Management and Co-ordination (Air Quality) Regulations, (L.N. No. 34, of 2014)
- Environmental Management and Co-Ordination (Controlled Substances) Regulations, 2007 (Chapter 387);
- Environmental Management and Coordination (Water Quality) Regulations, 2006 (Chapter 387); and
- Environmental Management and Coordination (Waste Management) Regulations, 2006 (Chapter 387).

The EIA regulations describe the legally enforceable EIA process (including public participation requirements), elaborate on the role and responsibilities of the agents provided for in the EMCA and describe the post-EIA environmental monitoring and auditing requirements (see s. 12.4 for more detail on the EIA process).

12.3.5 Permits and licences

No person can commence with an undertaking specified in the Second Schedule of the EMCA unless an EIA Licence has been issued in accordance with the EIA Regulations (see Appendix 12-1 of this Chapter for the list of Second Schedule activities).

While the EMCA and EIA Regulations do not specify the validity period of an EIA Licence, a guideline document states that an EIA Licence is valid for 24 months from the date of issue.

Some activities will need other permits in addition to the Environmental Permit. For example, a mine will require a licence from the Ministry of Petroleum and Mining to operate.

12.3.6 Penalties

The Act clearly specifies what is considered an offence, and penalties are specified for each offence. These are summarised in Table 12.1.

Table 12.1: Offences and penalties in terms of the Environmental Management and Co-Ordination Act

| Section of the EMCA | Offence | Penalty |
|---------------------|---|--|
| 137 | Hinder, obstruct or impersonate an environmental inspector | Imprisonment for a term of not less than one year but not more than four years, or to a fine of not less than two million shillings but not more than four million shillings, or to both such fine and imprisonment. |
| 138 | Failure to submit a project report, EIA report, or make false statements in documents submitted under the EMCA. | Imprisonment for a term not exceeding twenty four months or to a fine of not more than two million shillings, or to both such fine and imprisonment. |
| 139 | Failure to keep records required under the EMCA, fraudulently altering such records and making false statements in such records. | Imprisonment for a term of not less than one year but not more than four years, or to a fine of not less than two million shillings but not more than four million shillings, or to both such fine and imprisonment. |
| 140 | Contravene any environmental standard prescribed under the EMCA. | Imprisonment for a term of not less than one year but not more than four years or to a fine of not less than two million shillings but not more than four million shillings, or to both such fine and imprisonment. |
| | Use of the environment or natural resources in a wasteful and destructive manner. | |
| 141 | Failure to manage any hazardous waste or materials in accordance with the EMCA. | A fine of not less than one million shillings, or to imprisonment for a term of not less than two years, or to both. |
| 142 | Discharge of any dangerous materials or substances into land, water, air contrary to the provisions of the EMCA. | A fine of not less than two million shillings but not more than five million shillings. |
| 143 | Failure to comply with an environmental restoration order, environmental easement issued, environmental conservation order, or any order by the Tribunal made under the EMCA. | Imprisonment for a term of not less than one year and not more than four years or to a fine of not less than two million shillings and not more than four million shillings or to both such fine and imprisonment. |
| | Failure by a lead agency to comply with a directive of the Authority under section 12 of the EMCA | |
| 144 | Contravening any provision of the EMCA or regulations for which no penalty is specifically provided for. | Imprisonment for a term of not less than one year but not more than four years, or to a fine of not less than two million shillings but not more than four million shillings, or to both such fine and imprisonment. |

12.3.7 Fees

The EA Regulations require fees to be paid for the issuing of an EIA Licence. The fees payable are laid out in

Table 12.2.

Table 12.2: Fees associated with issuing of an EIA Licence

| Fee payable for | Fees |
|---|---|
| Inspection of records/register. | KSh 200 per record/register. |
| Processing of project report (fee payable upon submission of a project report). | 50% of 0.05% of the total cost of the project, to the minimum of KSh. 10,000 and maximum of KSh. 1,000,000. |
| Issuing of licence (fee payable upon collection of the EIA Licence). | 50% of 0.05% of the total cost of the project, to the minimum of KSh. 10,000 and maximum of KSh. 1,000,000. |
| Surrender, transfer or variation of EIA licence. | KSh 5,000. |

12.3.8 Guidelines

Section 58 (7) requires EIAs to be conducted in accordance with guidelines issued under the EMCA. This provision is reiterated in the EIA Regulations. The Third Schedule of the EIA Regulations endorses “*the general EIA and administrative procedures*” as authoritative. The EIA Guidelines and Administrative Procedures document (hereafter referred to as the EIA Guidelines) was published in 2002 by the Authority. The Authority has published a few other related guidelines which are available in digital form from their website¹. These include:

- National Sand Harvesting Guidelines (2007);
- National Guidelines on Safe Management and Disposal of Asbestos (2013)
- National Solid Waste Management Strategy (2015);
- National Guidelines for SEA (2011);
- Environment Action Plan Preparation Guidelines (2016); and
- Guidance pack for an application for an emission licence for stationary sources as per the Air Quality Regulations (2014).

12.3.9 Environmental standards

Kenya has in-country standards for effluent discharge (Table 12.3), noise (Table 12.4) and air quality (Table 12.5) published under the EMCA in the following regulations:

- Environmental Management and Coordination (Water Quality) Regulations, 2006 (Chapter 387);
- Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, (L.N. No. 61 of 2009); and
- The Environmental Management and Co-ordination (Air Quality) Regulations, (L.N. No. 34, of 2014).

¹ <http://www.nema.go.ke/>

Table 12.3: Standards for effluent discharge into the environment (Third Schedule)

| Parameter | Max Allowable Limits (in mg/l, except where indicated) |
|--|--|
| 1,1,1-trichloroethane | 3 |
| 1,1,2-trichloroethane | 0.06 |
| 1,1-dichloroethylene | 0.2 |
| 1,2-dichloroethane | 0.04 |
| 1,3-dichloropropene | 0.02 |
| Ammonia, ammonium compounds, NO ₃ compounds and NO ₂ compounds (sum total of ammonia-N times 4 plus nitrate-N and Nitrite-N) | 100 |
| Arsenic | 0.02 |
| Arsenic and its compounds | 0.1 |
| Benzene | 0.1 |
| Biochemical Oxygen Demand (BOD 5 days at 20° C) | 30 |
| Boron | 1.0 |
| Boron and its compounds – non marine | 10 |
| Boron and its compounds –marine | 30 |
| Cadmium | 0.01 |
| Cadmium and its compounds | 0.1 |
| Carbon tetrachloride | 0.02 |
| Chemical Oxygen Demand (COD) | 50 |
| Chromium VI | 0.05 |
| Chloride | 250 |
| Chlorine free residue | 0.10 |
| Chromium total | 2 |
| cis -1,2- dichloro ethylene | 0.4 |
| Copper | 1.0 |
| Dichloromethane | 0.2 |
| Dissolved iron | 10 |
| Dissolved Manganese | 10 |
| E.coli (counts / 100 ml) | Nil |
| Fluoride | 1.5 |
| Fluoride and its compounds (marine and non-marine) | 8 |
| Lead | 0.01 |
| Lead and its compounds | 0.1 |
| n-Hexane extracts (animal and vegetable fats) | 30 |
| n-Hexane extracts (mineral oil) | 5 |
| Oil and grease | Nil |

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| Parameter | Max Allowable Limits (in mg/l, except where indicated) |
|--|--|
| Organo-Phosphorus compounds (parathion, methyl parathion, methyl demeton and Ethyl parantrophyenyl phenylphosphorothroate, EPN only) | 1.0 |
| Polychlorinated biphenyls (PCB) | 0.003 |
| pH (marine) (units) | 5.0-9.0 |
| pH (non-marine) (units) | 6.5-8.5 |
| Phenols | 0.001 |
| Selenium | 0.01 |
| Selenium and its compounds | 0.1 |
| Hexavalent chromium compounds | 0.5 |
| Sulphide | 0.1 |
| Simazine | 0.03 |
| Total Suspended Solids | 30 |
| Tetrachloroethylene | 0.1 |
| Thiobencarb | 0.1 |
| Temperature (in degrees Celsius) based on ambient temperature | ± 3 |
| Thiram | 0.06 |
| Total coliforms (counts /100 ml) | 30 |
| Total Nickel | 0.3 |
| Total Dissolved solids | 1200 |
| Colour in Hazen Units (H.U) | 15 |
| Detergents | Nil |
| Total mercury | 0.005 |
| Trichloroethylene | 0.3 |
| Zinc | 0.5 |

Table 12.4: Maximum permissible noise levels (First Schedule)

| Zone | | Sound Level Limits dB(A) (Leq,14 h) | | Noise Rating Level (NR) (Leq,14 h) | |
|------|--|--|---------|---------------------------------------|---------|
| | | Day* | Night** | Day* | Night** |
| A. | Silent Zone | 40 | 35 | 30 | 25 |
| B | Places of worship | 40 | 35 | 30 | 25 |
| C. | Residential: Indoor | 45 | 35 | 35 | 25 |
| | Outdoor | 50 | 35 | 40 | 25 |
| D. | Mixed residential (with some commercial and places of entertainment) | 55 | 35 | 50 | 25 |
| E. | Commercial | 60 | 35 | 55 | 25 |

Time Frame: *Day: 6.01 a.m. – 8.00 p.m. (Leq, 14 h); **Night: 8.01 p.m. – 6.00 a.m. (Leq, 10h)

Table 12.5: Ambient Air Quality Tolerance Limits (First Schedule)

| Pollutant | Time weighted Average | Industrial area | Residential, rural & other areas | Controlled areas*** |
|--|-----------------------|------------------------|-----------------------------------|-----------------------|
| Sulphur oxides (SO _x); | Annual average* | 80 g/m ³ | 60 g/m ³ | 15 g/m ³ |
| | 24 hours** | 125 g/m ³ | 80 g/m ³ | 30 g/m ³ |
| | Annual average | - | 0.019 ppm 50g/m ³ | - |
| | Month average | - | - | - |
| | 24 hours | - | 0.048 ppm 125 g/m ³ | - |
| | One hour | - | - | - |
| | Instant peak | - | 500 g/m ³ | - |
| | Instant peak (10 min) | - | 0.191 ppm | - |
| Oxides of Nitrogen (NO _x) | Annual average* | 80 g/m ³ | 60 g/m ³ | 15 g/m ³ |
| | 24 hours** | 150 g/m ³ | 80 g/m ³ | 30 g/m ³ |
| | 8 hours | - | - | - |
| | Annual average | - | 0.2 ppm | - |
| | Month average | - | 0.3 ppm | - |
| | 24 hours | - | 0.4 ppm | - |
| | One hour | - | 0.8 ppm | - |
| | Instant peak | - | 1.4 ppm | - |
| Nitrogen Dioxide | Annual average | 150 g/m ³ | 0.05 ppm | - |
| | Month average | - | 0.08 ppm | - |
| | 24 hours | 100 g/m ³ | 0.1 ppm | - |
| | One hour | - | 0.2 ppm | - |
| | Instant peak | - | 0.5 ppm | - |
| Suspended Particulate matter | Annual average* | 360 g/m ³ | 140 g/m ³ | 70 g/m ³ |
| | 24 hours** | 500 g/m ³ | 200 g/m ³ | 100 g/m ³ |
| | Annual average**** | | 100 g/m ³ | |
| | 24 hours*** | - | 180 g/m ³ | - |
| Respirable Particulate Matter (PM ₁₀) | Annual average* | 70 g/m ³ | 50 g/m ³ | 50 g/m ³ |
| | 24 hours** | 150 g/Nm ³ | 100 g/Nm ³ | 75 g/Nm ³ |
| PM _{2.5} | Annual average | 35 g/m ³ | - | - |
| | 24 hours | 75 g/m ³ | - | - |
| Lead (Pb) | Annual average* | 1.0 g/Nm ³ | 0.75 g/Nm ³ | 0.50 g/m ³ |
| | 24 hours** | 1.5 g/m ³ | 1.00 g/m ³ | 0.75 g/m ³ |
| | Month average | - | 2.5 | - |
| Carbon monoxide (CO)/ Carbon dioxide (CO ₂) | 8 hours** | 5.0 mg/m ³ | 2.0 mg/m ³ | 1.0 mg/m ³ |
| | 1 hour | 10.0 mg/m ³ | 4.0 mg/m ³ | 2.0 mg/m ³ |

| Pollutant | Time weighted Average | Industrial area | Residential, rural & other areas | Controlled areas*** |
|--|-----------------------|----------------------|----------------------------------|---------------------|
| | 24 hours** | - | - | - |
| Hydrogen Sulphide | 24 hours** | 150g/m ³ | - | - |
| Non-methane hydrocarbons | Instant peak | 700ppb | - | - |
| Total Volatile Organic Compounds (VOC) | 24 hours** | 600 g/m ³ | - | - |
| Ozone | 1-Hour | 200 g/m ³ | - | - |
| | 8-hour (instant peak) | 120 g/m ³ | 1.25 ppm | - |

Notes:

Values at Standard Temperature and Pressure (STP)

Conversion factors from ppm to mg/m³ and mg/m³ to ppm are stipulated under the Eleventh Schedule

* Annual Arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval.

** 24 hourly/8 hourly values should be met 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days. Whenever and wherever two consecutive values exceed the limit specified above for the respective category, it would be considered adequate reason to institute regular/continuous monitoring and further investigations. The 24-hour limit may not be exceeded more than three times in one year;

*** Not to be exceeded more than once per year average concentration

12.3.10 Certification of environmental consultants

According to s. 58 of the EMCA only authorised EIA experts may conduct EIAs. The Authority is required to maintain a register of authorised EIA experts and Reg. 13 of the EIA Regulations elaborates on the requirements for the registration of EIA experts. The EIA Regulations' Fourth Schedule provides the criteria to be met in order to register as an EIA expert. The fees associated with an application for registration as EIA expert and an annual licence to practice as an EIA expert are laid out in Table 12.6 and Table 12.7 below:

Table 12.6: Fees associated with application for registration as an EIA expert

| Category | KSh (Citizen) | KSh (Non-Citizen) |
|----------------------|---------------|-------------------|
| (a) Lead Expert | 3,000 | 9,000 |
| (b) Associate Expert | 2,000 | 6,000 |
| (c) Firm of Experts | 5,000 | 15,000 |

Table 12.7: Annual licence fee to practice as an EIA expert

| Category | KSh (Citizen) | KSh (Non-Citizen) |
|----------------------|---------------|-------------------|
| (a) Lead Expert | 5,000 | 15,000 |
| (b) Associate Expert | 3,000 | 9,000 |
| (c) Firm of Experts | 20,000 | 60,000 |

There is no explicit requirement for the consultants to be independent of the applicant in either financial terms (excluding normal remunerations for consultancy services) or corporately.

12.4 EIA procedural framework in Kenya

The steps required to conduct an EIA are outlined in the following sub-sections and shown schematically in Figure 12.2.

12.4.1 Project Report (screening)

A proponent should determine if the intended development activity is included in the list of projects requiring submission of an EIA Study report (see Appendix 12-1). If the activity is a listed project the proponent should compile and submit a Project Report and pay the prescribed fee (see

Table 12.2). The preparation of a Project Report may only be undertaken by an EIA Expert registered in accordance with the EMCA and its EIA Regulations (see s. 12.3.10). Regulation 7 of the EIA Regulations specifies the following content requirements for a Project Report:

- The nature of the project;
- The location of the project;
- The activities according to each project phase (i.e. construction, operation and decommissioning phases);
- The design of the project;
- The materials to be used, products and by-products, including waste to be generated by the project and the methods of their disposal;
- The potential environmental impacts of the project (including economic and socio-cultural impacts to the local community) and the mitigation measures to be taken during and after implementation of the project;
- An action plan for the prevention and management of possible accidents as well as to ensure the health and safety of the workers and neighbouring communities; and
- The project budget.

In addition to the abovementioned content requirements, the proponent should consider the environmental issues laid out in the Second Schedule to the EIA Regulations. These issues have been arranged into five categories:

1. Ecological considerations;
2. Social considerations;
3. Landscape;
4. Land use; and
5. Water.

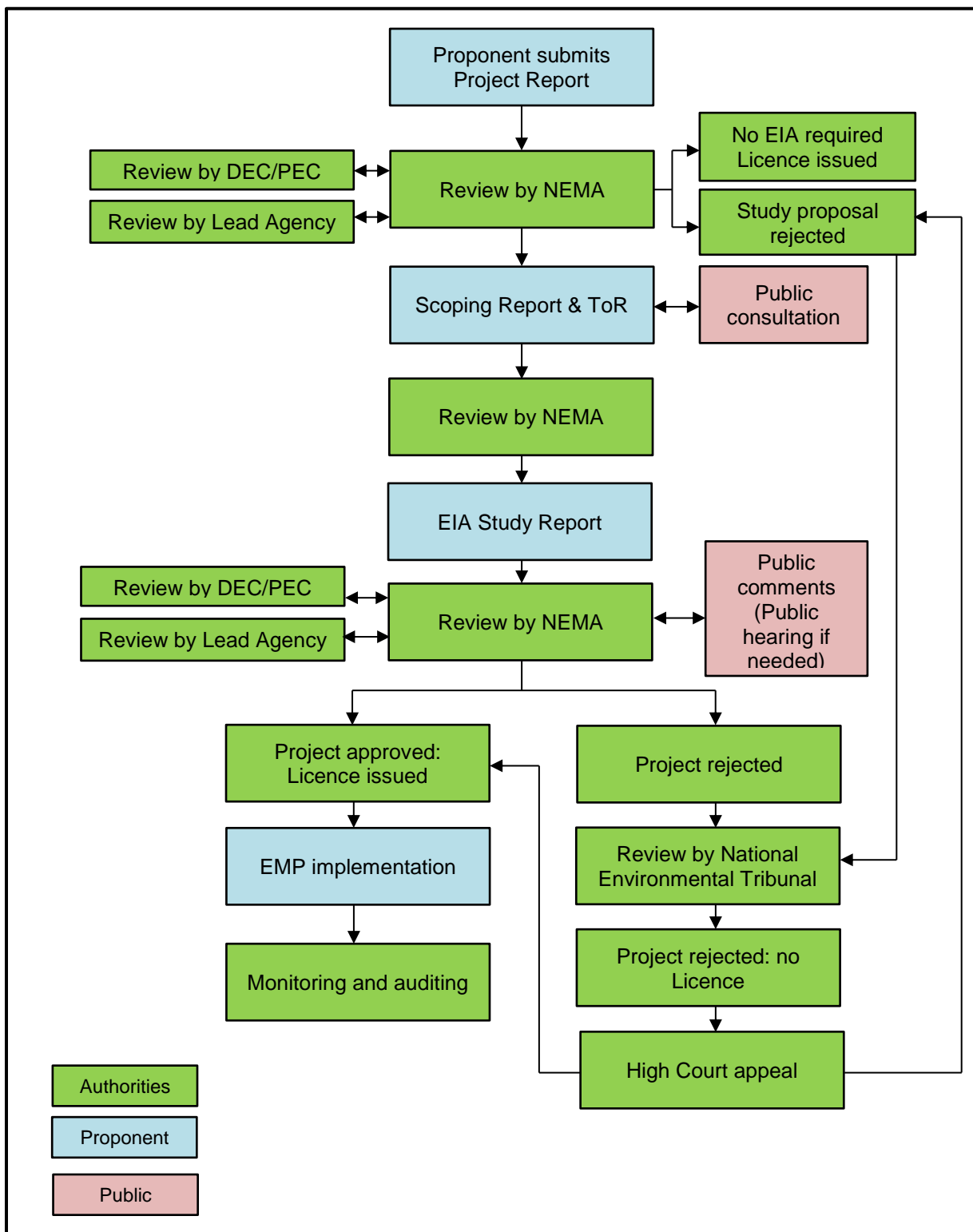


Figure 12.2: Flow diagram of the Kenyan EIA procedure

Source: NEMA 2002 EIA Guidelines

Neither the EMCA nor the EIA Regulations explicitly stipulate public participation as part of the preparation of a Project Report. However, the EIA Guidelines (see section 12.3.8 above) specifically require that all people and institutions likely to be affected by a project should be consulted and their views incorporated in the Project Report.

The proponent is required to submit at least 10 copies of the Project Report to the Authority. Within seven days of receipt of a Project Report, the Authority should submit a copy of the Project Report to each lead agency² and the relevant District Environment Committee (DEC). Where more than one district is involved, a copy should be submitted to the relevant Provincial Environment Committee (PEC). These organs of state are required to submit their comments to the Authority within 21 days of receipt of Project Report. If no comments are received by the Authority from the aforementioned organs of state within 30 days of receipt of the Project Report, the Authority may proceed to review the Project Report. The Authority should take a decision on a Project Report and inform the proponent within 45 days of receipt.

If the Authority is of the opinion that the project will have a significant impact on the environment and that the mitigation measures described in the Project Report are not sufficient to address the significant potential impacts, the proponent will be required to undertake an EIA study. If the Authority is satisfied that the project will have no significant impact on the environment an EIA Licence will be issued.

12.4.2 Scoping

After being instructed to undertake an EIA study, the proponent should carry out a scoping study, during which the key aspects of the environment requiring detailed investigation should be identified. The scoping study culminates with the production of terms of reference (ToR) for the EIA study. The ToR should consider the environmental issues contained in the Second Schedule to the EIA Regulations (see section 12.4.1 above). The ToR should be submitted to the Authority for approval, but no timeframes for the consideration of the ToR by the Authority are provided for in the EIA Regulations. After the Authority approves the ToR for the EIA study, the proponent is required to submit the names and qualifications of the EIA experts, registered in accordance with the EMCA and EIA Regulations (see section 12.3.10), appointed to undertake the EIA study.

The EIA Regulations stipulate public participation requirements which should be carried out after receiving approval of the Scoping Report. These include the following:

- Notify the public of the project and its anticipated effects by -
 - Placing posters in strategic public places near the site of the proposed project informing the affected parties and communities of the proposed project;
 - Publishing a notice on the proposed project for two consecutive weeks in a newspaper with nation-wide circulation; and

² According to the EIA Regulations, “lead agency” means any government ministry, department, parastatal, state corporation or local authority, in which any law vests functions of control or management of any element of the environment or natural resources.

- Make an announcement about the project in official and local languages over a radio station with a nation-wide coverage at least once a week for two consecutive weeks;
- Hold at least three public meetings with the affected parties and communities;
- Ensure that appropriate notices are sent out at least one week prior to the meetings and that the venue and times of the meetings are convenient for the affected communities; and
- Record both oral and written comments and any translations thereof received during all public meetings for inclusion in the scoping report.

12.4.3 EIA study

After receiving approval for the ToR for the EIA study, the proponent should commence with the study. The EIA Regulations (Reg. 16) describe the following objectives for an EIA study:

- “(a) identify the anticipated environmental impacts of the project and the scale of the impacts;*
- (b) identify and analyse alternatives to the proposed project;*
- (c) propose mitigation measures to be taken during and after the implementation of the project;*
- and*
- (d) develop an environmental management plan (EMP) with mechanisms for monitoring and evaluating the compliance and environmental performance which shall include the cost of mitigation measures and the time frame of implementing the measures.”*

The EIA Regulations prescribe the content requirements for an EIA study report. These include:

- A non-technical summary outlining the key findings, conclusions and recommendations;
- Description of the proposed project;
- Description of the relevant legislation;
- Description of the potentially affected environment;
- Description of the potential impacts (social and biophysical);
- Description and evaluation of alternatives considered;
- Description of mitigation measures for potential impacts (including emergency procedures); and
- An Environmental Management Plan (EMP).

12.4.4 Review of EIA study report

The proponent should upon completion of the EIA study submit 10 copies and an electronic copy of the EIA study report to the Authority. Within 14 days of receipt of an EIA study report the Authority should submit a copy of the EIA study report to the relevant lead agencies and invite the public to make oral or written comments on the report.

The Authority shall at the expense of the proponent carry out the following public participation efforts:

- Publish a notice inviting comments on the EIA study report in the government gazette and once a week for two consecutive weeks in a newspaper with nation-wide circulation; and

- Announce the same notice in official and local languages over a radio station with a nation-wide coverage once a week for two consecutive weeks;

The notice should state where the report can be inspected and the duration of the comments period. If deemed necessary, the Authority may hold a public hearing in accordance with Reg. 22 of the EIA Regulations.

The relevant lead agencies are required to submit their comments to the Authority within 30 days of receipt of EIA study report. If no comments are received by the Authority from these agencies within 30 days of receipt of the report, the Authority may proceed to review the report. The Authority should take a decision on a report (i.e. refuse or grant an EIA Licence) within three months of receipt of the report. The Authority should inform the proponent of the decision taken within 14 days of taking the decision.

12.4.5 Appeals

Provision is made in s. 129 of the Act for an appeal process. Any person aggrieved by a decision or action made in terms of the EMCA may within 60 days after the occurrence of the event against which s/he is dissatisfied appeal to the Tribunal in such manner as may be prescribed by the Tribunal (see section 12.2.4).

If any person is aggrieved by a decision taken or order made by the Tribunal, they may within 30 days of such decision or order, appeal against such decision or order to the High Court (see Figure 12.2).

12.4.6 Inspections and monitoring

Regulation 31 of the EIA Regulations requires all projects to undergo an environmental audit. The audit should be based on the baseline information provided in an EIA study report and should take place within a period of 12 months of the commencement of operations, but not more than 24 months after completion of a project, whichever is earlier. The audit should be conducted in accordance with ToR developed by the proponent in consultation with the Authority as well as the requirements laid out in Regulations 31 and 35 of the EIA Regulations.

A control audit should be carried out by the Authority, as and when deemed necessary by the Authority, to verify the proponents' self-audit reports. As stated in section 12.2.5, an Environmental Inspector may at any reasonable time enter any premises for the purpose of ensuring compliance with the EMCA.

12.4.7 Strategic Environmental Assessment

Section 57A of the EMCA provides for Strategic Environmental Assessment (SEA) of all policies, plans and programmes prepared or adopted by an authority (national, regional, county or local level) prior to implementation. The EIA Regulations require that the following be considered when undertaking an SEA:

- The use of natural resources;
- The protection and conservation of biodiversity;

- Human settlement and cultural issues;
- Socio-economic factors; and
- The protection and conservation of natural physical surroundings of scenic beauty and the built environment of historic or cultural significance.

Regulation 43 of the EIA Regulations specifies the following SEA report requirements:

- A summary of the potential significant impacts of a proposed policy, plan or programme;
- Potential opportunities to promote or enhance the environment;
- Recommendations for mitigating potential negative effects; and
- Alternative policy, plan or programme options.

12.4.8 Trans-boundary impacts

Kenya lies on the east coast of Africa. The country shares a border with Somalia to the north-east, Ethiopia to the north, South Sudan and Uganda to the west and Tanzania to the south. However, the need to consider trans-boundary impacts is not explicitly stated in the EMCA or the EIA regulations.

12.5 Other relevant environmental legislation

A number of sector laws in Kenya are relevant to EIA. Table 12.8 provides a summary of the relevant sector legislation.

Table 12.8: Other potentially applicable sectoral requirements

| Sector | Primary agency | Title and date of document | Purpose |
|-----------------|----------------------------------|---|--|
| Water resources | Ministry of Water and Sanitation | Water Act, 2002 (Chapter 372) | Provides for the management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water; to provide for the regulations and management of water supply and sewerage services; repeals the Water Act (Chapter 372) and certain provisions of the Local Government Act |
| | Kenya Water Institute | Kenya Water Institute Act, 2001 (Chapter 372A) | Establishes the Kenya Water Institute, to provide for its incorporation, powers and functions, and for connected purposes |
| | | Environmental Management and Coordination (Water Quality) Regulations, 2006 (Chapter 387) | Provides rules relative to the use and discharge of water for domestic, agricultural and industrial purposes, makes provision for the protection of water resources from pollution and defines water quality standards. |

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| Sector | Primary agency | Title and date of document | Purpose |
|----------------------------------|---|---|--|
| Waste | Ministry of Environment and Forestry (MEF) | Environmental Management and Coordination (Waste Management) Regulations, 2006 (Chapter 387) | Defines rules for the management of waste in general and for the management of solid waste, industrial waste, hazardous waste, pesticides and toxic substances, biomedical waste and radioactive substances in particular. |
| Air | MEF | The Environmental Management and Co-ordination (Air Quality) Regulations, (L.N. No. 34, of 2014) | Provides for the control of the emission of various air pollutants, makes provision for the protection from air pollution and defines air quality standards. |
| Noise | MEF | Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, (L.N. No. 61 of 2009) | Prescribes measures against noise and vibrations from specified sources and define permissible noise levels for various activities including mining and construction. The Regulations require a licence to be obtained from the NEMA for noise-producing activities and provide for noise and excessive vibrations mapping by designated mapping bodies. |
| Forestry | MEF | Forest Conservation and Management Act, No. 34 of 2016 | Gives effect to Article 69 of the Constitution with regard to forest resources; provides for the development and sustainable management, including conservation and rational utilisation of all forest resources for the socioeconomic development of the country. |
| Conservation and wildlife | Ministry of Tourism and Wildlife | Wildlife Conservation and Management Act, No. 47 of 2013 | Provides for the protection, conservation, sustainable use and management of wildlife in Kenya. |
| | | Wildlife Conservation and Management (Protection of Endangered and Threatened Ecosystems, Habitats and Species) Regulations, L.N. No. 242 of 2017 | Provides for the protection of endangered and threatened ecosystems, habitats and species in Kenya. |
| Fisheries and marine environment | Ministry of Agriculture Livestock and Fisheries | Fisheries Act 1989 (Chapter 378) | Provides for the development, management, exploitation, utilisation and conservation of fisheries. |
| | Kenya Fisheries Services | Fisheries Management and Development Act, No. 35 of 2016 | Provides for the conservation, management and development of fisheries and other aquatic resources to enhance the livelihood of communities dependent on fishing and to establish the Kenya Fisheries Services. |
| | | Maritime Zones Act, 1989 (Chapter 371) | Consolidates the law relating to the territorial water and the continental shelf of Kenya; provides for the |

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| Sector | Primary agency | Title and date of document | Purpose |
|------------------------------|---|--|---|
| | | | establishment and delimitation of the exclusive economic zone of Kenya; provides for the exploration and exploitation and conservation and management of the resources of the maritime zones. |
| Health | Ministry of Health | Health Act, 2017 (No. 21 of 2017) | Establishes a unified health system, coordinates the inter-relationship between the national government and county government health systems, provides for regulation of health care service and health care service providers, health products and health technologies. |
| | | Public Health Act 1921 (Cap. 242) | Provides for the protection of public health in Kenya and lays down rules relative to, among other things, food hygiene and protection of foodstuffs, the keeping of animals, protection of public water supplies, the prevention and destruction of mosquitos and the abatement of nuisances including nuisances arising from sewerage |
| Planning and land | Ministry of Lands and Physical Planning | Physical Planning Act, 1996 (Chapter 286) | Provides for the preparation and implementation of physical development plans. |
| | | Land Act, No. 6 of 2012 | Gives effect to Article 68 of the Constitution, revises, consolidates and rationalises land laws; provides for the sustainable administration and management of land and land-based resources. |
| Mining and mineral resources | Ministry of Petroleum and Mining | Mining Act, No. 12 of 2016 | Gives effect to Articles 60, 62 (1)(f), 66 (2), 69 and 71 of the Constitution in so far as they apply to minerals; provides for prospecting, mining, processing, refining, treatment, transport and any dealings in minerals. |
| Energy | Ministry of Energy | Energy Act, 2006 (Chapter 314) | Amends and consolidates the law relating to energy, provides for the establishment, powers and functions of the Energy Regulatory Commission and the Rural Electrification Authority |
| | Energy Regulatory Commission Rural Electrification Authority | Petroleum (Exploration and Production) Act (Chapter 308) | Regulates the negotiation and conclusion by the Government of petroleum agreements relating to the exploration for, development, production and transportation of, petroleum. |

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| Sector | Primary agency | Title and date of document | Purpose |
|---|---|---|---|
| Archaeological, historical and cultural | Ministry of Sports, Culture and Heritage | National Museums and Heritage Act (Chapter 216) | Consolidates the law relating to national museums and heritage; provides for the establishment, control, management and development of national museums and the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya; repeals the Antiquities and Monuments Act. |
| Labour employment and occupational health | Ministry of Labour and Social Protection National Council for Occupational Safety and Health | The Occupational Safety and Health Act, 2007 | Provides for the safety, health and welfare of workers and all persons lawfully present at workplaces, provides for the establishment of the National Council for Occupational Safety and Health. |

Appendix 12-1: Projects requiring submission of an EIA Study report (Second Schedule)**1. Changes in land use including:**

- (a) Major changes in land use;
- (b) Large scale resettlement schemes;

2. Urban Development including:

- (a) Designation of new townships;
- (b) Establishment of industrial estates;
- (c) Establishment of new housing developments exceeding 30 housing units;
- (d) Establishment or expansion of recreational areas in National Parks, National reserves, Forest and nature reserves and any areas designated as environmentally sensitive;
- (e) Shopping centres and complexes;

3. Transportation:

- (a) All paved roads;
- (b) Construction of new roads in environmentally sensitive areas;
- (c) Railway lines;
- (d) Airports and airfields;
- (e) Oil and gas pipeline;
- (f) Water transport;
- (g) Construction of tunnels;

4. Dams, rivers and water resources including:

- (a) Any project located within a distance prescribed by a written law from a wetland, ocean, sea, lake, river, dam, stream, spring or any other water body;
- (b) Storage dams, barrages and piers;
- (c) River diversions and water transfer between catchments;
- (d) Large scale flood control schemes;
- (e) Drilling for the purpose of utilizing ground water resources including geothermal energy;

5. Aerial spraying.**6. Mining, including quarrying and open-cast extraction of:**

- (a) Precious metals;
- (b) Gemstones;
- (c) Metalliferous ores;
- (d) Coal;
- (e) Phosphates;

- (f) Limestone and dolomite;
- (g) Large scale commercial stone and slate;
- (h) Commercial large-scale harvesting of aggregate, sand, gravel, soil and clay;
- (i) Exploration for the production of petroleum in any form;
- (j) Extracting alluvial gold with use of mercury;
- (k) Geothermal energy exploration and production;

7. Forestry related activities:

- (a) Timber harvesting;
- (b) Clearance of forest areas;
- (c) Reforestation/afforestation with alien species;
- (d) Introduction of alien species;
- (e) Excisions of gazetted forest for whatever purposes;
- (f) Any projects located within forest reserves such as construction of dams or other control structures that flood large areas of relatively un degraded areas;

8. Agriculture including:

- (a) Large scale agriculture;
- (b) Introduction of new pesticides;
- (c) Pest control programs (large scale);
- (d) Widespread introduction of new crops and animals;
- (e) Widespread introduction of fertilizers;
- (f) Irrigated agriculture exceeding 50 ha;
- (g) Major developments in biotechnology including the introduction and testing of genetically modified organisms;

9. Processing and manufacturing industries including:

- (a) Mineral processing, reduction of ores and minerals;
- (b) Smelting and refining of ores and minerals;
- (c) Foundries;
- (d) Large scale brick and earth ware manufacture;
- (e) Cement works and lime processing;
- (f) Glass works;
- (g) Explosive plants;
- (h) Fertilizer manufacture or processing;
- (i) Oil refineries and petrochemical works;
- (j) Large scale tanning and dressing of hides and skins;
- (k) Large scale abattoirs (more than 15 animals/day) and meat processing plants;
- (l) Large scale brewing and malting;
- (m) Bulk grain processing and storage;

- (n) Large scale fish processing plants;
- (o) Pulp and paper mills;
- (p) Large scale food processing plants;
- (q) Plants for manufacture of assembly of motor vehicles;
- (r) Plants for the construction and repair of aircrafts or railway equipment;
- (s) Plants for the manufacture of tanks, reservoirs and sheet metals containers;
- (t) Plants for the manufacture of coal briquettes;
- (u) Plants for the manufacturing of batteries;
- (v) Chemical works and processing plants;
- (w) Plants for the manufacture or assembly of motor vehicles;

10. Electrical infrastructure including:

- (a) electricity generation stations;
- (b) Electrical transmission lines above 66 KVA;
- (c) Electrical sub stations;
- (d) Pumped storage schemes.;

11. Management of hydrocarbons:

Bulk storage of natural gas, petroleum and any combustible and explosive fuels.

12. Waste disposal including:

- (a) Sites for solid waste disposal;
- (b) Sites for toxic, hazardous and dangerous wastes;
- (c) Wastewater treatment plants;
- (d) Sewage treatment plants;
- (e) Works involving major atmospheric emissions;
- (f) Installations for disposal of industrial wastes;
- (g) Works emitting offensive odours;

13. Natural conservation areas:

- (a) Establishment of Protected areas, buffer zones, and wilderness Areas;
- (b) Commercial exploitation of natural fauna and flora;
- (c) Introduction of alien species of flora and fauna into ecosystems;
- (d) Actions likely to affect endangered species of flora and fauna;
- (e) Wetlands reclamation and or any projects likely to affect wetlands;
- (f) Projects located in indigenous forests including those outside of gazetted forests;
- (g) Projects that affect any areas designated as environmentally sensitive areas;

14. Nuclear Reactors and nuclear plants.

15. Marine areas:

- (a) Mineral exploitation of resources in the marine areas;
- (b) Reclamation of marine areas;

Acronyms

| | |
|---------|--|
| DEC | District Environment Committee |
| EA | Environmental Assessment |
| EIA | EIA |
| EMCA | Environmental Management and Co-ordination Act |
| EMP | Environmental Management Plan |
| KEFRI | Kenya Forest Research Institute |
| KFS | Kenya Forest Service |
| KSh | Kenyan Shilling |
| KWTA | Kenya Water Towers Agency |
| L.N. | Legal Notice |
| NEMA | National Environment Management Authority |
| NETFUND | National Environment Trust Fund |
| MEF | Ministry of Environment and Forestry |
| PEC | Provincial Environment Committee |
| SEA | Strategic Environmental Assessment |
| ToR | Terms of Reference |

List of useful contacts in EIA Ministry/ Agency/ Department

| Institution | Telephone | Email | Website |
|--|---|--|---|
| Ministry of Environment, and Forestry | +254 20 2730808/9 +254 20 2725707 | psoffice@environment.go.ke | http://www.environment.go.ke |
| National Environment Management Authority (NEMA) | Fax: +254 20 6008997 Tel: +254 20 2101370/ 2183718/ 2307281/ 2103696 Mobile: +254 724 253398, +254 735 013046 | dgnema@nema.go.ke | http://www.nema.go.ke/ |