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No. 29 of 2019
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THE NUCLEAR REGULATORY ACT, 2019

AN ACT of Parliament to provide for a comprehensive framework for the regulation of safe, secure and peaceful utilization of atomic energy and nuclear technology; the production and use of radiation sources and the management of radioactive waste; the repeal of the Radiation Protection Act and for connected purposes

ENACTED by the Parliament of Kenya as follows—

PART I—PRELIMINARY

1. This Act may be cited as the Nuclear Regulatory Act, 2019.

2. In this Act, unless the context otherwise requires—

   “activity” means the production, use, import and export of radiation sources for industrial, research and medical purposes; the transportation of radioactive material; the siting, construction, commissioning, operation, and decommissioning of facilities; radioactive waste management activities and site remediation;
   
   “applicant” means a person making an application for an authorization under this Act;
   
   “Authority” means the Kenya Nuclear Regulatory Authority established under section 5;
   
   “authorization” means the granting by the Authority of a written permission for an authorized person to perform a specified activity and includes a licence, permit, registration and approval;
   
   “authorized person” means a holder, whether natural or corporate, of a valid authorization for a specified activity;
   
   “Board” means the Board of the Authority established under section 8;
   
   “Cabinet Secretary” means the Cabinet Secretary for the time being responsible for matters relating to health;
   
   “carrier” means any person, organization or government, undertaking the carriage of radioactive material by any means of transport and includes both carriers for hire or reward and carriers on own account;
“clearance” means the removal of radioactive material or radioactive objects within authorized activities from any further regulatory control by the Authority;

“clearance levels” means values established by the Authority and expressed in terms of radioactivity concentrations or total activity, at or below which sources of radiation may be released from regulatory control by the Authority;

“consignment” means any package or packages, or load of radioactive material, presented by a consignor for transport;

“consumer product” means a device or manufactured item into which radionuclides have been deliberately incorporated or produced by activation, or which generates radiation, and which can be sold and made available to members of the public without special surveillance or regulatory control after sale;

“containment” means the methods or physical structures that prevent the dispersion of radioactive substances;

“contamination” means the presence of radioactive substances in or on a material or the human body or other place where they are undesirable or could be harmful or the process giving rise to their presence in such places;

“decommissioning” means all steps leading to the release of a facility, other than a disposal facility, from regulatory control other than confirming the decommissioned status of a facility and includes the processes for decontamination and dismantling;

“Director General” means the chief executive officer of the Authority appointed under section 9;

“discharges” means planned and controlled releases into the environment, as a legitimate practice, within the limits authorized by the Authority, of liquid or gaseous radioactive material that originates from regulated nuclear facilities during normal operations;

“disposal” means the emplacement of spent fuel or radioactive waste in an appropriate facility without the intention of retrieval;

“dose” means a measure of the radiation received or absorbed by a target;
“dose limit” means the value of the effective dose or the equivalent dose to individuals from controlled activities that may not be exceeded;

“exemption” means the determination by the Authority that a source or activity need not be subject to some or all aspects of regulatory control on the basis that the exposure (including potential exposure) due to the source or activity is too small to warrant the application of those aspects or that this is the optimum option for protection irrespective of the actual level of the doses or risks;

“export” means the physical transfer, originating from an exporting State, into an importing State, of nuclear or other radioactive material, including sources;

“exposure” means the act or condition of being subject to irradiation;

“facility” means —

(a) a nuclear facility or any other location that the authorized person has control over;

(b) a radiation source facility;

(c) a radioactive waste management facility and any other premises where radioactive material is produced, processed, used, handled, stored or disposed of, on such a scale that consideration of protection of safety is required;

(d) a reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant or a separate storage installation; or

(e) any location where nuclear materials in amount greater than one effective kilogram is customarily used;

“fissile material” means uranium-233, uranium-235, plutonium-239, plutonium-241, or any combination of these radionuclides with the exception of —

(a) natural uranium or depleted uranium which is unirradiated; and

(b) natural uranium or depleted uranium which has been irradiated in thermal reactors only;
“Fund” means the Decommissioning Fund established under section 52;

“import” means the physical transfer, into an importing State or to a recipient of an importing State, originating from the exporting State, of nuclear or other radioactive material including sources;

“incident” means any unintended event, including operating errors, equipment failures, initiating events, accident precursors, near misses or other mishaps, or unauthorized acts, malicious or non-malicious, the consequences or potential consequences of which are not negligible from the point of view of protection or safety;

“inspection” means a set of activities —

(a) carried out by the International Atomic Energy Agency inspectors at a facility or a location to verify that the nuclear material subject to safeguards remains in peaceful nuclear activities or is otherwise adequately accounted for, or as may be prescribed by the Authority; or

(b) carried out by the Authority for the purposes of verifying compliance with the provisions of this Act;

“intervention” means any action intended to reduce or avert exposure or the likelihood of exposure to sources which are not part of a controlled practice or which are out of control as a consequence of an accident;

“ionizing radiation” for the purposes of radiation protection, means radiation capable of producing ion pairs in biological materials;

“management” means the administrative and operational activities that are involved in the manufacture, supply, receipt, possession, storage, use, transfer, import, export, transport, maintenance, recycling or disposal of radioactive sources and other radioactive material;

“naturally occurring radioactive material” means radioactive material containing no significant amounts of radionuclides altered from natural settings, or present in technologically enhanced concentrations above background radiation levels due to human activities that may result in a relative increase in radiation exposures and risks to the public and the environment;

“non-ionizing radiation” means optical radiation, radio frequency radiation, low-frequency electric and
magnetic fields, ultrasonic radiation and any other radiation with similar biological effects;

"notification" means a document submitted to the Authority by a legal person to notify an intention to carry out an activity or other use of a source;

"nuclear energy" means any form of energy released in the course of nuclear fission or nuclear fusion or of any other nuclear transmutation;

"nuclear facility" means any civilian facility where nuclear material is produced, processed, used, handled or disposed of, including a nuclear installation, premises, nuclear power plant, research reactor, fuel fabrication plant, spent fuel storage facility, enrichment plant, reprocessing facility or any other facility determined by the Authority;

"nuclear fuel cycle" means all operations associated with the production of nuclear energy, including mining, milling, processing and enrichment of uranium or thorium; manufacture of nuclear fuel; operation of nuclear reactors; reprocessing of spent fuel; decommissioning; and any activity for radioactive waste management and any research or development activity related to any of the foregoing;

"nuclear material" means nuclear fuel, other than natural uranium and depleted uranium, capable of producing energy by a self-sustained chain process of nuclear fission outside a nuclear reactor, either alone or in combination with some other material and radioactive products or waste;

"nuclear or radiological emergency" means an emergency in which there is, or is perceived to be, a hazard due to —

(a) the energy resulting from a nuclear chain reaction or from the decay of the products of a chain reaction; or

(b) radiation exposure;

"nuclear power plant" means a nuclear power reactor and related facilities;

"nuclear science and technology" means nuclear applications, including use of nuclear energy, for exclusively peaceful purposes;

"optimize" means the process of determining what level of protection and safety makes exposures, and the
probability and magnitude of potential exposures, as low as reasonably achievable, as required by the International Commission on Radiological Protection System of Radiological Protection, taking into account economic and social factors;

“orphan source” means a radioactive source which is not under regulatory control, either because it has never been under regulatory control or because it has been abandoned, lost, misplaced, stolen or transferred without proper authorization;

“physical protection” means measures for the protection of nuclear material or authorized facilities, designed to prevent unauthorized access or removal of fissile material or sabotage with regard to safeguards;

“radiation” means and shall include, both ionizing and non-ionizing radiation;

“radiation protection” means the protection of people from the effects of exposure to radiation, and the means for achieving this;

“radiation source” means a radiation generator, or a radioactive source or other radioactive material not outside the nuclear fuel cycles of research and power reactors and includes naturally occurring radiation sources, orphan sources and radioactive material exempt from regulatory control;

“radioactive material” means material designated as such by the Authority and subject to regulatory control because of its radioactive nature;

“radioactive waste” means material, in whatever physical form, remaining from activities or interventions and for which no further use is foreseen —

(a) that contains or is contaminated with radioactive substances and has radioactivity or radioactivity concentration higher than the level set for clearance from regulatory requirements; and

(b) exposure to which is not excluded under applicable regulations;

“radioactive waste management” means all activities, including decommissioning activities that relate to the handling, pre-treatment, treatment, conditioning, storage, or disposal of radioactive waste, excluding off-site transportation and may involve discharges;
“radioactive waste management facility” means a facility and its associated land, buildings and equipment in which radioactive waste is managed;

“research reactor” means a nuclear reactor used mainly for generation and utilization of neutron flux and ionizing radiation for research and other purposes, including experimental facilities associated with the reactor and storage, handling and treatment facilities for radioactive materials on the same site that are directly related to safe operation of the research reactor;

“sabotage” means any deliberate act directed against a nuclear facility or nuclear material in use, storage or transport which could directly or indirectly endanger the health and safety of workers, the public or the environment by exposure to radiation or release of radioactive substances;

“safeguards Agreement” means an agreement between Kenya and the International Atomic Energy Agency for the application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons and the Additional Protocol as entered into force on 18th September, 2009;

“safety” means the protection of people, property and the environment against radiation risks, and the safety of facilities and activities that give rise to radiation risks;

“security” means the prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear or other radioactive material, or their associated facilities;

“source” means anything that may cause exposure by emitting ionizing radiation or by releasing radioactive substances or material and can be treated as a single entity for protection and safety purposes;

“source material” means —
(a) uranium containing the mixture of isotopes occurring in nature;
(b) uranium depleted in the isotope 235;
(c) thorium or any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; and
(d) any other material containing one or more of the foregoing in such concentration as determined by the International Atomic Energy Agency from time to time;
“spent fuel” means nuclear fuel that has been irradiated and permanently removed from a reactor core;

“spent fuel management” means all activities that relate to the handling or storage of spent fuel, excluding off-site transportation and may involve discharges;

“spent fuel management facility” means any facility or installation the primary purpose of which is spent fuel management;

“storage” means the holding of spent fuel or radioactive waste in a facility that provides for its containment with the intention of retrieval; and

“transport” means all operations and conditions associated with and involved in the movement of nuclear or other radioactive material including the design, manufacture, maintenance and repair of packaging, and the preparation, consigning, loading, carriage including in-transit storage, unloading and receipt at the final destination of loads of such material and packages.

3. The objects and purposes of this Act are to —

(a) regulate the safe, secure and peaceful development, production, possession, use, storage, transport, transfer, disposal or handling of nuclear and radioactive materials, activities and facilities and other apparatus generating radiation; and

(b) protect persons, property and the environment in relation to nuclear and radioactive material, activities and facilities and other apparatus generating ionizing radiation.

4. (1) This Act shall apply to any person dealing with nuclear or radioactive material, activities or facilities and other apparatus generating radiation.

(2) The Authority may, subject to the provisions of this Act, exempt any activity, facility or source from the application of this Act.

PART II—KENYA NUCLEAR REGULATORY AUTHORITY

5. (1) There is hereby established an Authority to be known as the Kenya Nuclear Regulatory Authority.

(2) The Authority shall be a body corporate with perpetual succession and a common seal, and shall in its corporate name be capable of —
(a) suing and being sued;

(b) taking, purchasing or otherwise acquiring, holding, charging or disposing of movable and immovable property;

(c) borrowing money and lending money;

(d) entering into contracts; and

(e) performing all other acts for the furtherance of the provisions of this Act.

(3) The headquarters of the Authority shall be in Nairobi or such other place as the Authority may, by resolution, determine.

6. The objects and functions of the Authority shall be to—

(a) ensure the safe, secure and peaceful use of nuclear science and technology;

(b) provide for the protection of persons, property and the environment against the harmful effects of ionizing radiation through the establishment of a system of regulatory control;

(c) exercise regulatory control over—

(i) siting, design construction, operation, manufacture of component parts and decommissioning of facilities;

(ii) nuclear and radioactive materials and facilities; and

(iii) such other activities as may, with the prior approval of the National Assembly, be prescribed which the Authority may seek to exercise regulatory control over;

(d) ensure compliance with the conditions of authorization through the implementation of a system of inspections and enforcement;

(e) co-ordinate the fulfillment of national obligations in respect of nuclear safety, security and safeguards;

(f) co-operate with any relevant international agency by providing any assistance or information required;

(g) establish appropriate awareness methods and procedures for informing and consulting the public.
and other interested parties about the regulatory process and the safety, health and environmental aspect of regulated activities including incidents, accidents and abnormal occurrences; and

(h) perform any other functions as may be provided for in this Act.

7. (1) The Authority shall have all the powers necessary for the execution of its functions under this Act and any other written law.

(2) Without prejudice to the generality of subsection (1), the Authority shall have powers to—

(a) control, supervise and administer all assets in such manner and for such purpose as best promotes the purpose of its establishment;

(b) determine the provisions to be made for its capital and recurrent expenditure and for its reserves;

(c) receive any grants, gifts, donations or endowments and make legitimate disbursements therefrom;

(d) levy such fees as it may determine necessary;

(e) enter into association with other bodies or organizations within or outside Kenya as may be desirable or appropriate in furtherance of the purpose for which it is established;

(f) open bank accounts for its funds;

(g) invest any of its funds not immediately required for its purposes in the manner provided under section 20;

(h) hold inquiries and gather any relevant information including requisition of reports, records, documents and any information from any source including any state organ and to compel the production of such information where it considers necessary; and

(i) undertake any other activity that may be necessary for the fulfillment of any of its functions under this Act.

(3) The Authority shall, in discharging its mandate under this Act, be guided by the following principles—

(a) protection of persons, property and the environment;
(b) national security;
(c) independence;
(d) responsibility and accountability;
(e) transparency;
(f) co-operation; and
(g) need not be bound by the strict rules of evidence.

8. (1) The management of the Authority shall be vested in a Board comprising—

(a) a non-executive Chairperson who shall be appointed by the President;

(b) the Principal Secretary of the Ministry responsible for internal security or his or her representative;

(c) the Principal Secretary of the National Treasury or his or her representative;

(d) the Principal Secretary of the Ministry responsible for energy or his or her representative;

(e) the Principal Secretary of the Ministry responsible for education or his or her representative;

(f) the Principal Secretary of the Ministry responsible for health or his or her representative;

(g) the Principal Secretary of the Ministry responsible for defence or his or her representative;

(h) the Attorney-General or his or her representative;

(i) three members appointed by the Cabinet Secretary by virtue of their knowledge and experience of not less than ten years in matters relating to engineering, law, radiation or nuclear related science, environmental or public safety, or finance; and

(j) the Director-General, who shall be an ex-officio member.

(2) The Board shall appoint its own secretary.
9. (1) There shall be a Director-General who shall be the chief executive officer of the Authority appointed by the Board and whose terms and conditions of service shall be determined by the Board in the instrument of appointment or otherwise in writing from time to time.

(2) No person shall qualify for appointment under this section unless such person —

(a) has at least a degree in either, physical science, nuclear science, engineering, law, social sciences or any other relevant field; and

(b) has at least ten years' experience at management level.

(3) The Director-General shall, subject to the directions of the Board, be responsible for the day to day management of the affairs and staff of the Authority.

10. The Board may appoint such professional and technical staff for the proper discharge of the functions of the Authority under this Act, on such terms and conditions of service as the Board may determine on the advice of the Salaries and Remuneration Commission.

11. The conduct and regulation of the business of the Board shall be as provided in the Schedule, but subject thereto, the Board shall regulate its own procedure and the procedure of any of its committees thereof.

12. The members of the Board shall be paid such remuneration, fees or allowances as the Cabinet Secretary, in consultation with the Salaries and Remuneration Commission, may determine.

13. No matter or thing done by a member of the Authority or any officer, employee or agent of the Authority shall, if the matter or thing is done bona fide for executing the functions, powers or duties of the Authority, render the member, officer, employee or agent or any person acting by his directions personally liable to any action, claim or demand whatsoever.

14. The provisions for this Act shall not relieve the Authority of the liability to pay compensation or damages to any person for any injury to him, his property or any of his interests caused by the exercise of any power conferred by this Act or by the failure, whether wholly or partially, of any works.

15. (1) The common seal of the Authority shall be kept in such custody as the Board may direct and shall not
be affixed to any instrument or document except as authorized by the Board.

(2) All instruments or documents issued under the common seal of the Authority shall be authenticated under the hand of the Director-General.

(3) The common seal of the Authority, when affixed to a document and duly authenticated shall be judicially and officially noticed and unless and until the contrary is proved, any necessary order or authorization by the Board under this section shall be presumed to have been duly given.

PART III—FINANCIAL PROVISIONS

16. (1) The funds of the Authority shall comprise of

   (a) monies allocated by the National Assembly for the purposes of the Authority;

   (b) such monies or assets as may accrue to the Authority in the course of exercise of its powers, or in the performance of its functions under this Act; and

   (c) monies from other sources including loans, grants, or donations to the Authority.

(2) The Authority shall open a bank account for its funds and its balances at the close of each financial year shall not be paid into the Consolidated Fund but shall be retained for the purposes of this Act in accordance with Article 206 (1) (a) and (b) of the Constitution.

17. The financial year of the Authority shall be the period of twelve months ending on the thirtieth of June of every year.

18. (1) At least three months before the commencement of each financial year, the Board shall cause to be prepared estimates of the revenue and expenditure of the Authority for that year.

(2) The annual estimates shall make provision for all the estimated expenditure of the Authority for the financial year concerned and in particular shall provide for —

   (a) the payment of salaries, allowances and other charges in respect of the staff of the Authority;

   (b) the payment of pensions, gratuities and other charges in respect of the staff of the Authority;
(c) the maintenance, repair and replacement of the equipment and other property of the Authority;

(d) implementation of the regulatory control programme; and

(e) any other expenditure as may be necessary for the carrying out of the objects and functions of the Authority under this Act.

(3) The annual estimates shall be approved by the Authority before the commencement of the financial year to which they relate and shall be submitted to the Cabinet Secretary for approval.

(4) No expenditure shall be incurred for the purposes of the Authority except in accordance with the annual estimates approved under subsection (3).

19. (1) The Board shall cause to be kept all proper books and records of account of the income, expenditure, assets and liabilities of the Authority.

(2) Within a period of three months after the end of a financial year, the Board shall submit to the Auditor-General the accounts of the Authority for that year together with —

(a) a statement of income and expenditure during the year; and

(b) a statement of the assets and liabilities of the Authority as on the last day of that year.

(3) The annual accounts of the Authority shall be prepared, audited, and reported upon in accordance with the Public Audit Act, 2015.

20. The Authority may invest any of its funds in securities, trust funds or banks which the National Treasury may from time to time, approve for that purpose.

PART IV—REGULATORY CONTROL: NOTIFICATIONS, AUTHORIZATIONS, INSPECTIONS AND ENFORCEMENT

21. (1) A person who intends to engage in any activity shall submit a notification to the Authority of his intention to carry out such activity.

(2) The Authority shall prescribe by regulations a notification regime prescribing the form, manner and time limits within which the notification shall be made.
22. (1) A person shall not carry out an activity unless the activity has been —
   (a) specifically authorized by the Authority; or
   (b) exempted, wholly or partially from regulatory control, by the Authority.

(2) An application for authorization under this section shall be in the prescribed form and manner and shall include any information and documents as required by the Authority, including —
   (a) a detailed description of the activity, nuclear or radioactive material, its intended use and the facility in which it shall be used;
   (b) a description of the radiation protection measures and for physical protection of the nuclear or radioactive material or facility;
   (c) a plan for the management of radioactive waste resulting from the use of nuclear or radioactive material; and
   (d) proof of payment of prescribed fees.

(3) The Authority may issue an authorization —
   (a) only for activities that can be conducted in a manner that adequately ensures the protection of people, property and the environment; and
   (b) upon such other terms and conditions as may be prescribed.

(4) A person who contravenes this section commits an offence and is liable upon conviction to a fine not exceeding five million shillings or imprisonment for a term not exceeding five years or to both.

23. (1) The Authority may establish categories of authorization for any activity for a specified period and subject to the terms and conditions specified in the authorization.

(2) The Authority may require an authorized person to submit such reports as the Authority may from time to time request.

24. (1) An authorization issued under this Act may be suspended, modified, or revoked by the Authority in the event of —
   (a) a contravention of this Act;
(b) violation of the terms and conditions of the authorization; or

c) any circumstance where the Authority determines that continued activity under the authorization would pose a risk to people, property or the environment.

(2) A responsibility arising out of an authorization under this Act shall not be transferred unless with the written approval of the Authority.

(3) An authorization shall cease to be valid when any time limit prescribed under the provisions of this Act lapses or the terms and conditions of the authorization expire.

25. A person authorized to conduct an activity shall have the primary responsibility for the safe and secure conduct of the activity and for ensuring compliance with this Act and all applicable regulations.

26. (1) A person aggrieved by a decision of the Authority under this Part shall have the right to apply to the Authority for a review of the decision.

(2) An application for review under subsection (1) shall be filed with the Authority within thirty days of communication of the decision and shall state the factual, legal and procedural ground on which it is based.

(3) The Authority shall within sixty days of receipt of an application for review, make a finding and communicate the same to the authorized person.

(4) An application for review under this section shall not have the effect of suspending the decision by the Authority.

(5) Nothing under this section stops an applicant from seeking alternative means of redress in a court of law.

27. (1) The objectives of inspection and enforcement is to monitor compliance with the requirements of this Act, and the terms and conditions of the authorization issued by the Authority, such that —

(a) facilities and activities meet the necessary regulatory requirements;

(b) relevant documents and instructions to authorized persons are valid and are being complied with by the authorized persons, employees or agents;
(c) persons engaged in authorized activities possess the competence necessary for their functions;

(d) deficiencies and deviations from authorization requirements are remedied without undue delay; and

(e) lessons learnt from authorized activities are communicated to other authorized persons, the Authority and any other relevant persons.

(2) The Authority shall establish a planned and systematic inspection programme consisting of routine and reactive inspections that are announced and unannounced to monitor compliance with this Act and all applicable regulations.

28. (1) The Authority shall, by notice in the Gazette appoint persons of such qualifications as may be prescribed, to be inspectors for the jurisdiction specified in the notice of appointment.

(2) An inspector appointed under subsection (1) shall

(a) carry out inspections of facilities and activities so as to —

(i) monitor compliance with the provisions of this Act and all applicable regulations; and

(ii) compile and submit reports of inspection to the Authority; and

(b) perform such other functions as the Authority may deem necessary.

29. An inspector appointed under this Act may —

(a) enter any facility which he has reason to believe is necessary in order to ascertain whether the provisions of this Act are being complied with;

(b) be accompanied by a duly authorized employee of the Authority;

(c) take any equipment or material required for any purpose for which power of entry is being exercised;

(d) carry out such inspections and make such recording as may be necessary;

(e) interview the licensee or any of its employees;

(f) direct that any part of the facility which he has power to enter, or anything in such facility, be left
undisturbed for as long as is reasonably necessary for the purpose of any inspection;

(g) take appropriate samples, articles or substances found in any facility which he has power to enter; and

(h) request the production of any records which may be required to be kept under this Act.

30. (1) Where an inspector determines that an activity is being conducted in violation of the provisions of this Act or that the activity poses an immediate risk of injury or damage to persons, property or the environment, the inspector may—

(a) immediately order the temporary suspension of the activity;

(b) order the authorized person to prohibit workers who do not meet applicable requirements from engaging in the activity;

(c) order that nuclear material, radioactive material or any other apparatus generating ionizing radiation originating from a suspended activity or facility be safely and securely stored; and

(d) take any other action as may be prescribed under the provisions of this Act.

(2) An order issued by an inspector under subsection (1) shall continue to be in force unless—

(a) withdrawn by the inspector;

(b) reversed or modified by the Authority; or

(c) modified or altered through an administrative or judicial review.

(3) An inspector who undertakes any enforcement action specified in subsection (1) shall prepare a report indicating the reasons for his action and identifying the evidentiary basis for his findings including measurements, test samples, explanations and any other relevant information.

(4) The report prepared under subsection (3) shall be made available to the authorized person who shall have the right to submit explanations or objections within the time specified by the Authority.

(5) The Authority may prescribe the circumstances under which the prior approval of the Authority shall be
obtained by an inspector prior to taking any of the actions specified in subsection (1).

31. (1) Upon receipt of an inspection report under section 30, the Authority shall—

(a) where the report is accompanied by objections, review the objections and issue such orders as may be necessary; and

(b) ensure that relevant measures have been taken against the persons contravening the provisions of the Act.

(2) The person subject to enforcement action shall take necessary measure to—

(a) remedy compliance as directed by the Authority or as soon as practically possible; and

(b) prevent recurrence.

(3) The Authority may, where the case presents an immediate safety or security hazard to people, property or the environment, require the authorized person to suspend its activities until the situation has been remedied.

PART V — RADIATION PROTECTION

32. (1) An authorised person shall—

(a) justify every radiation practice and prove that its benefits outweigh the health detriment to the people and environment;

(b) optimize the radiation protection of people and the environment in such a way that exposures, are as low as reasonably achievable, taking into account economic and social factors;

(c) put mechanisms in place to ensure dose limits are not exceeded for practices where such limits apply; and

(d) ensure the protection of persons from the harmful effects of exposure to ionizing radiation.

(2) Exemptions from regulatory control under subsection (1) shall be based on the criteria that—

(a) the radiation risk for persons is sufficiently low to be of no regulatory concern;
(b) the collective radiological impact is sufficiently low that regulatory control is not warranted; and

(c) the source or activity is considered to be inherently safe, with no likelihood of creating situations that could result in a failure to meet the criteria in paragraphs (a) or (b).

33. (1) An authorization of an activity by the Authority under this Act shall be subject to the radiation protection requirements set out in subsection (2).

(2) The authorized person shall —

(a) possess an adequate understanding of the fundamental principles of radiation protection, justification, optimization and dose limitation;

(b) take all steps necessary for the protection and safety of workers, patients and the public by keeping doses below the relevant threshold and ensuring that all reasonable steps are taken to minimize adverse effects on the population, at present and in the future;

(c) plan and implement the technical and organizational measures necessary to ensure adequate safety, including effective defenses against radiological hazards;

(d) prepare and implement an appropriate emergency plan;

(e) ensure compliance with the dose limits established by the Authority and monitor the radiation exposure of workers;

(f) possess adequate human and financial resources to conduct the proposed activity in a manner that ensures safety and security;

(g) not modify the conduct of any authorized activity in a manner that could affect the protection of workers, patients and the public or the environment without seeking the written approval of the Authority; and

(h) provide upon request by the Authority, all information considered to be necessary by the Authority.

34. (1) No consumer products shall be offered to the public unless their use by members of the public has been
justified and either their use has been exempted or their provision to the public has been authorized by the Authority.

(2) Upon receipt of an application for authorization under subsection (1), the Authority shall—

(a) verify compliance with the provisions of this Act and applicable regulations;

(b) verify the assessments and selection parameters presented by the applicant;

(c) determine whether the end use of the product can be exempted; and

(d) if necessary, authorize the provision to the public of the consumer product subject to specific conditions of authorization or exempt the consumer product.

(3) A person who imports consumer products, as exempt products shall ensure the products are packaged and labelled in a manner as prescribed by the Authority.

(4) A person who contravenes this section commits an offence and is liable upon conviction to a fine not exceeding five million shillings or to imprisonment for a term not exceeding five years, or to both.

Medical exposure.

35. (1) Every authorized person shall ensure that no person, whether symptomatic or asymptomatic, incurs medical exposure unless—

(a) the radiological procedure has been requested by an appropriately qualified and registered clinician or medical practitioner within their respective care level;

(b) responsibility has been assumed for ensuring protection and safety; and

(c) the person subject to the exposure has been informed of the expected benefits and risks and has consented to the exposure.

(2) Every authorized person shall ensure that all practicable measures have been taken to minimize the likelihood of unintended or accidental medical exposure.

(3) Where unintended or accidental radiation exposure occurs, the authorized person shall implement corrective action and report to the Authority.
(4) A person who contravenes this section commits an offence and is liable on conviction to a fine not exceeding one million shillings or to imprisonment for a term not exceeding one year or to both.

36. (1) Where an authorized person undertakes an activity likely to cause public exposure to neighboring States, the authorized person shall notify the Authority of the intended activity.

(2) Upon receipt of a notification under subsection (1), the Authority shall notify the neighbouring State of the intended activity.

(3) Any person who contravenes subsection (1) commits an offence and is liable on conviction to a fine not exceeding ten million shillings or to imprisonment for a term not exceeding ten years or to both.

PART VI—SAFETY OF RADIATION SOURCES AND FACILITIES

37. The Authority shall —

(a) establish a system of control over radiation sources to ensure they are safely managed and securely protected during and at the end of their useful lives; and

(b) prescribe a categorization of sources based on the potential injury to people and the environment.

38. An authorized person shall bear the primary responsibility for ensuring the safe and secure use of radiation sources.

39. The Authority shall —

(a) establish and maintain a national register of radiation sources;

(b) establish the categories of radiation sources required to be included in the national register; and

(c) ensure protection of information contained in the national register to guarantee the safety and security of these sources as appropriate.

40. An authorized person shall promptly report to the Authority any —

(a) loss of control over radiation sources, or any other situation; or
(b) incident in connection with a radiation source that may pose a significant risk of radiological injury to persons or substantial damage to property or the environment.

41. The Authority shall —

(a) establish a system for recovery and safe management of orphan sources;

(b) be responsible for coordinating the response to radiological emergencies as a result of orphan sources;

(c) bear the primary responsibility of the safety of orphan sources of which it has notice;

(d) establish programmes aimed at detecting orphan sources in places where such sources are generally suspected to be;

(e) draw up appropriate response plans and measures for handling orphan sources; and

(f) give specialized technical advice and assistance to persons not normally involved in operations subject to radiation protection requirements and who suspect the presence of an orphan source.

42. (1) The Authority shall develop requirements and guidelines to be met before the issuance of a mining and milling license in relation to uranium, thorium or other radioactive elements.

(2) The requirements under subsection (1) shall be in respect of —

(a) exploration;

(b) removal from site for testing and evaluation;

(c) excavation activities at site;

(d) siting and construction of the mine;

(e) operation of the mine and processing facility;

(f) transport;

(g) waste management; and

(h) decommissioning of the mine.
PART VII—SAFETY OF NUCLEAR FACILITIES AND DECOMMISSIONING

43. (1) A person who intends to carry out an activity related to a nuclear facility shall obtain an authorization from the Authority.

(2) An authorization under this section shall be required for the siting, construction, operation and decommissioning of a nuclear facility.

(3) The Authority shall prescribe requirements in connection with the authorization, review and assessment of a nuclear facility, including the requirements for —

(a) nuclear facility design;
(b) siting;
(c) construction;
(d) commissioning;
(e) operation;
(f) decommissioning;
(g) remediation; and
(h) such other activity relating to construction and operation, as may be necessary.

(4) The authorization requirements prescribed under subsection (3) shall make a distinction between —

(a) nuclear power plants;
(b) research reactors; and
(c) other nuclear facilities.

(5) An application for authorization under this section shall be in such form and manner as may be prescribed.

(6) The Authority shall ensure that the general public is informed and consulted at appropriate steps during the authorization process of a nuclear facility.

(7) Any person who contravenes this section commits an offence and is liable on conviction to a fine not exceeding one million shillings or to imprisonment for a term not exceeding two years, or to both.

44. The authorized person shall bear the primary responsibility for ensuring safety and security of the facility and all activities associated with it.

45. (1) A person applying for a site authorization for a nuclear power plant shall prepare a site evaluation report in accordance with subsection (2).
(2) The site evaluation report shall contain —

(a) the frequency and severity of external natural and human induced events and phenomena that could affect the safety of the facility;

(b) the foreseeable evolution of natural and man-made factors in the region that may have a bearing on safety for a time period that encompasses the projected lifetime of the facility;

(c) the hazards associated with external events that are to be considered in the design of the facility, including the potential combined effects of hydrological, hydrogeological and meteorological conditions;

(d) particulars relating to safety such as the storage and transport of nuclear material;

(e) the possible non-radiological impact of the facility, due to chemical or thermal releases, and the potential for explosion and dispersion of chemical products;

(f) the potential for interactions between nuclear and non-nuclear effluents;

(g) the potential radiological impacts in operational states and conditions on people in the region, including impacts that could lead to emergency measures or potential impacts outside the territory of the Republic of Kenya;

(h) total nuclear capacity to be installed on the site, with provision for re-evaluation of the site if the installed capacity is to be significantly increased beyond the level assessed in a previous site evaluation; and

(i) such other matters as may be prescribed.

46. (1) Before granting a construction authorization for a nuclear power plant, the Authority shall review and assess —

(a) the competence and capability of the applicant or authorized person to meet relevant authorization requirements during construction and operation;

(b) the site evaluation report, prepared pursuant to the provisions of this Act, to confirm its acceptability,
and related information needed for the design of the proposed facility;

(c) the potential environmental impact of the proposed facility;

(d) the basic design of the proposed facility, to confirm that it can meet relevant safety, security and physical protection requirements;

(e) the management systems of the applicant or authorized person;

(f) research and development plans related to demonstration of the acceptability of the design; and

(g) arrangements for decommissioning and management of radioactive waste including financial mechanisms therefor.

2) During construction, the Authority shall review and assess —

(a) the development of the facility design through documentation submitted by the authorized person to determine its continued acceptability; and

(b) the progress of research and development activities related to demonstration of the acceptability of the design.

3) Before granting an operation authorization for a nuclear power plant, the Authority shall review and assess —

(a) the commissioning programme and, if needed, establish a schedule for further review and assessment prior to operation;

(b) as-built design and construction and manufacturing quality of the facility;

(c) results of non-nuclear commissioning tests;

(d) limits and conditions for operation during commissioning, with a staged approach, if necessary;

(e) provisions for radiation protection;

(f) adequacy of operating instructions and procedures, especially the main administrative procedures, general operating procedures and emergency operating procedures;
(g) recording and reporting systems;
(h) arrangements for training and qualification of facility personnel, including staffing levels and fitness for duty requirements;
(i) management systems for operation;
(j) emergency preparedness programme;
(k) accounting measures for nuclear and radioactive material;
(l) adequacy of physical protection measures;
(m) arrangements for periodic testing, maintenance, inspection and control of modifications and surveillance;
(n) arrangements for decommissioning and management of radioactive waste;
(o) results of commissioning tests; and
(p) limits and conditions for operation.

(4) During operation of a nuclear power reactor, the Authority shall require —

(a) the review and assessment of changes in operational limits and conditions or of significant safety related modifications, to be conducted prior to their authorization; and

(b) periodic reviews in every ten years or as the Authority may otherwise direct, of the operator’s compliance with relevant terms and conditions related to the facility’s safety and physical protection.

47. (1) An authorized person shall prepare in accordance with subsection (2), a technical preservation programme for any research reactor that enters into or continues in a state of extended shutdown.

(2) The technical preservation programme for research reactors shall include —

(a) arrangements for ensuring that the reactor core remains subcritical;

(b) procedures and measures to disconnect, dismantle and preserve the systems that are to be taken out of operation or temporarily dismantled;
(c) modifications of the safety analysis report and the operational limits and conditions;

(d) arrangements for dealing with the fuel and radioactive waste;

(e) regular surveillance and periodic inspection, testing and maintenance to ensure that the safety performance of structures, systems and components does not degrade;

(f) revised emergency planning arrangements;

(g) staffing requirements to undertake the tasks necessary to keep the reactor in a safe condition and to maintain knowledge about the research reactor; and

(h) arrangements for the security of the reactor and the facility.

(3) The Authority shall ensure the safe management of a reactor that is in extended shutdown.

48. (1) The Authority shall—

(a) establish requirements for the decommissioning of nuclear facilities where radioactive sources are produced, used or stored in accordance with subsection (2);

(b) require the applicant for an authorization to construct and operate a nuclear facility to—

(i) perform a baseline survey of the site, including radiological conditions, prior to construction; and

(ii) develop information prior to construction for comparison with the end state after decommissioning;

(c) ensure that relevant documents and records prepared by the authorized person are maintained for a specified period of time before, during and after decommissioning;

(d) establish criteria for determining when a nuclear facility or part of a facility must be permanently shut down; and

(e) evaluate the end state of the facility after decommissioning activities have been completed to ensure that relevant regulatory requirements have been met.
(2) The requirements referred to under subsection (1) (a) shall include —

(a) safety and environmental criteria, including conditions on the end state of decommissioning;
(b) limits and conditions for the removal of regulatory controls for facilities containing radionuclides;
(c) criteria for the clearance of radioactive material during and following decommissioning; and
(d) such other requirements as may be prescribed.

(3) A facility shall not be released by the Authority from regulatory control until the authorized person has demonstrated that the end state in the decommissioning plan has been reached and that any other additional regulatory requirements have been met.

49. (1) At the design stage of facilities, the applicant for an authorization to construct and operate a facility shall prepare an initial decommissioning plan for approval by the Authority.

(2) The plan prepared under subsection (1) shall be commensurate with the type and status of the facility and the hazards that may be associated with its decommissioning.

(3) The Authority shall —

(a) ensure that the public and interested parties are provided with an opportunity to review and comment upon the decommissioning plan prior to its approval;
(b) require the authorized person to provide periodic reviews and updates of the decommissioning plan and shall specify the maximum time interval between such reviews and updates;
(c) where specific circumstances result in significant changes to the initial decommissioning plan, require the authorized person, to revise and update the plan to reflect these changed circumstances and submit it to the Authority for approval;
(d) require that a final decommissioning plan be prepared and submitted for approval prior to the implementation phase of decommissioning activities; and
(e) ensure that a programme to implement and monitor compliance with remaining regulatory requirements has been established for sites where decommissioning has been completed but where authorizations or restrictions on future use of the site remain.

(4) The Authority shall, upon completion of decommissioning, ensure that appropriate records for confirmation of the completion of decommissioning activities are maintained in accordance with the approved decommissioning plan including the records of the premises and of the disposal of radioactive waste and material.

50. An authorized person shall, in implementing decommissioning activities at a facility, be responsible for

(a) ensuring safety, security and environmental protection, including any activities conducted by contractors or subcontractors;

(b) preparing the safety and environmental impact assessments necessary for implementation of the decommissioning plan;

(c) establishing a record keeping system of the key issues and modifications during the lifetime of the facility that may have an impact on decommissioning;

(d) ensuring that the baseline survey of the site is performed in an effective and timely manner;

(e) ensuring that new or untried methods for decommissioning are justified, addressed and submitted for approval by the Authority;

(f) informing the Authority within two months of a decision to permanently shut down a facility and submitting an application to decommission the facility, together with a proposed final decommissioning plan, within two years of permanent cessation of operation;

(g) in the case of deferred dismantling, ensuring that the facility has been placed and will be maintained in a safe configuration and will be adequately decommissioned in the future;

(h) establishing and maintaining a management organization and personnel resources to ensure that decommissioning can be completed safely,
including ensuring that responsible persons possess the necessary skills, expertise and training for safe decommissioning;

(i) establishing and maintaining emergency planning arrangements commensurate with the associated hazards and reporting significant incidents to the Authority; and

(j) ensuring that adequate financial arrangements are made for all stages of the decommissioning process.

51. (1) An applicant for an authorization to construct and operate a nuclear facility shall ensure that adequate financial resources will be available when needed to cover the costs associated with safe decommissioning, including management of the resulting waste.

(2) The amount of the financial resources to be made available for decommissioning activities shall—

(a) be commensurate with a facility specific cost estimate;

(b) be changed if the cost estimate increases or decreases; and

(c) be reviewed as part of the periodic review of the decommissioning plan.

PART VIII—DECOMMISSIONING FUND

52. There is established a fund to be known as the Decommissioning Fund.

53. The Fund shall consist of—

(a) all moneys appropriated by the National Assembly, or paid into, or allocated to the Fund under the provisions of any other Act;

(b) domestic and foreign grants; and

(c) any property or amount of money received or acquired from any other legal sources.

54. The Fund shall be administered by the Authority.

55. The functions of the Fund shall be to cater for—

(a) decommissioning under the Act; and

(b) the management of radioactive waste and spent fuel.
56. (1) The Cabinet Secretary, in consultation with the National Treasury, may make regulations on —

(a) the administrative operations of the Fund; and
(b) the financial requirements for decommissioning.

(2) Regulations made under subsection (1) shall be laid before Parliament.

PART IX—EMERGENCY PREPAREDNESS AND RESPONSE

57. The Authority in liaison with the national body or authority responsible for responding to national emergencies shall —

(a) define the criteria for classification of emergencies;
(b) review and approve emergency preparedness and response plans developed by an authorised person; and
(c) advise and provide technical support on radiological emergencies and nuclear accidents.

58. The Authority shall not authorize any activity, operation, facility, or possession or use of a source unless an appropriate emergency preparedness and response plan has been developed by the applicant and approved by the Authority.

59. (1) An on-site and off-site emergency plan shall be prepared in the prescribed form and manner for any facility, activity, or source.

(2) The emergency preparedness and response plans shall take into account —

(a) an assessment of the nature, likelihood and potential magnitude of resulting damage, including the population and territory at risk from an accident, malicious act or incident; and
(b) the results of any accident analyses and any lessons learnt from the experience or incidents and accidents that have occurred in connection with similar activities.

(3) Emergency preparedness and response plans shall be periodically reviewed as directed by the Authority.

60. The authorized person shall, in the event of a nuclear or radiological emergency, implement the emergency preparedness and response plan as approved by the Authority.
61. (1) In the event of a nuclear or radiological emergency that poses a risk that radioactive contamination could spread beyond the boundaries of the Republic of Kenya, the Authority shall immediately notify the International Atomic Energy Agency and the relevant authorities of any State which is or may be physically affected by a release that could be of a radiological nature.

(2) The Authority shall serve as the point of contact for providing any information or assistance regarding nuclear or radiological emergencies under the terms of relevant international instruments.

62. Every authorized person shall regularly inform the public and the Authority about the significant facts of its emergency preparedness and response plan.

PART X—TRANSPORTATION OF RADIOACTIVE MATERIAL

63. (1) The Authority shall make regulations for transportation of radioactive material in accordance with international standards.

(2) In developing the regulations under subsection (1), the Authority shall take into account the need to—

(a) protect persons, property and the environment;

(b) meet the obligations under relevant international instruments ratified or acceded to by Kenya;

(c) support international cooperation in the safe, secure and peaceful uses of nuclear science and technology; and

(d) support international efforts to prevent the proliferation of nuclear weapons, explosive and radiological dispersal devices.

64. (1) A person shall not—

(a) undertake the design of any packaging or package;

(b) operate or maintain any packaging or package; or

(c) transport, or cause or permit to be transported in any packaging or package,

any nuclear material or radiation source, otherwise than in accordance with the provisions of this Act.

(2) A person who contravenes the provisions of subsection (1) commits an offence and is liable on conviction, to a fine not exceeding five million shillings or
imprisonment for a term not exceeding five years or to both.

65. Without prejudice to any other provision under this Act, every carrier of a consignment shall exercise reasonable care to ensure that in the course of the transport of a consignment, no injury to health or any damage to property or to the environment is caused.

66. (1) Every carrier shall establish a radiation protection transport plan for application during transportation of nuclear material or radiation sources.

(2) The transport plan shall —
(a) take into account the nature and extent of the measures to be taken in respect of the likelihood and magnitude of radiation exposures or environmental contamination; and
(b) adopt a structured and systematic approach including consideration of the interfaces between the mode of transport and other activities.

(3) Any person who contravenes this section commits an offence and shall be liable on conviction to a fine not exceeding five million shillings or to an imprisonment for a term not exceeding five years, or to both.

67. (1) In the event of an accident or incident during the transportation of a nuclear material or radiation source, a carrier shall apply its radiation protection transport plan as approved by the Authority.

(2) Emergency response procedures shall take into account the formation of other dangerous substances that may result from the reaction between the contents of a consignment and the environment in the event of an accident.

68. Every carrier shall ensure that —
(a) during transport every consignment is segregated from any other dangerous goods; and
(b) radioactive and fissile properties, explosiveness, flammability, pyrophoricity, chemical toxicity and corrosiveness are taken into account in the packing, labeling, marking, placarding, storage and transport of a package in order to be compliant with the provisions of this Act or any other written law relating to dangerous goods in each of the States through or into which the consignment is transported.
PART XI—EXPORT AND IMPORT CONTROLS

69. (1) The provisions of this Part shall be applied to ensure controls over the export and import of nuclear materials, nuclear related equipment and technology all of which shall be referred to as controlled items for the purposes of this Part.

(2) The Authority shall establish a list of controlled items subject to export or import controls and in accordance with international obligations and commitments of the Republic of Kenya.

70. (1) A person shall not export a controlled item without prior license by the Authority.

(2) The following criteria shall be applied in granting a license for export of a controlled item—

(a) the receiving State has disclosed the use of and made a binding commitment to use the controlled item for peaceful uses only;

(b) levels of physical protection of the controlled item is consistent with those set forth in the Convention on the Physical Protection of Nuclear Materials;

(c) International Atomic Energy Agency Safeguards shall be applicable in relation to the controlled item;

(d) transfers of previously exported controlled items to a third State are subject to the prior approval by the Authority; and

(e) any reprocessing of the controlled item is subject to the approval by the Authority.

71. A person shall not import a controlled item unless the—

(a) controlled item is not otherwise prohibited under this Act; and

(b) designated recipient of the controlled item is holder of a valid authorization issued by the Authority.

72. Any person who—

(a) receives, possess, uses, transfers, transports, disposes or disperses a nuclear material or radiation source and which causes or is likely to cause death or serious injury to any person or damage to property or environment; or
(b) carries, sends, or moves nuclear material or radiation source, into or out of Kenya, without lawful authority or contrary to the prescribed manner, commits an offence and is liable on conviction to an imprisonment for a term not exceeding ten years without an option of a fine.

PART XII—RADIOACTIVE WASTE AND SPENT FUEL MANAGEMENT

73. (1) This Act shall apply to the management of any radioactive waste and spent fuel resulting from civilian applications in the Republic of Kenya, but shall not apply to waste that contains only naturally occurring radioactive material, unless it is declared as radioactive waste for the purposes of this Act by the Authority.

(2) The following principles shall be applied at all stages in the management of radioactive waste —

(a) that people, property and the environment are adequately protected against radiological and other hazards;

(b) generation of radioactive waste is kept to the minimum practicable;

(c) interdependence among the different steps of radioactive waste and spent fuel management is taken into account;

(d) protective measures for radioactive waste and spent fuel management in the Republic of Kenya are implemented in a manner that reflects internationally recognized criteria, standards and guidance;

(e) biological, chemical and other hazards that may be associated with radioactive waste and spent fuel management are adequately addressed;

(f) criticality and removal of residual heat generated during radioactive waste and spent fuel management are adequately addressed;

(g) actions imposing reasonably predictable impacts on future generations greater than those permitted for the current generation are avoided; and

(h) appropriate funding arrangements are in place.

74. (1) The primary responsibility for ensuring the safety and security of radioactive waste and spent fuel in a
radioactive waste or spent fuel management inside or outside a facility throughout its life rests with the holder of the relevant authorization.

(2) Every authorized person shall be responsible for the safe management of radioactive waste generated by the activities for which the authorization is issued and shall take all necessary measures to ensure that —

(a) generation of the activity and volume of radioactive waste are kept to the minimum practicable level by suitable design, operation and decommissioning of its facilities;

(b) radioactive waste is managed by appropriate classification, segregation, treatment, conditioning, storage or disposal, and maintaining records of such activities;

(c) management of radioactive waste is not unnecessarily delayed; and

(d) information sought by the Authority is furnished as requested.

75. The Authority shall establish a classification of radioactive waste to ensure the safe and secure management of radioactive waste in Kenya.

76. (1) Every authorized person shall submit a waste management plan to the Authority for approval prior to the grant of an authorisation.

(2) A waste management plan shall provide for the appropriate management of radioactive waste and shall include —

(a) an outline of the processes generating waste, and a description of the waste generated;

(b) a description of the environment into which the waste will be discharged or disposed, including the baseline radiological characteristics;

(c) a description of the proposed system for waste management including the facilities and procedures involved in the handling, transportation, treatment, storage or disposal of radioactive waste;

(d) prediction of environmental concentrations of radionuclide and radiation doses to people from
(d) the proposed waste management practices, including demonstration of adherence to the radiation protection requirements under this Act;

(e) a program for monitoring the concentration of radionuclides in the environment and assessment of radiation doses to members of the public arising from the waste management practices;

(f) emergency plans for dealing with accidental releases, or circumstances which might lead to uncontrolled releases of radioactive waste, to the environment;

(g) a schedule for reporting on the operation and results of monitoring and assessments required by this plan;

(h) a plan for decommissioning the operation and the associated waste management facilities and remediation of the site; and

(i) a system of periodic assessment and review of the adequacy and effectiveness of procedures instituted under the plan to ensure currency and to take account of potential improvements consistent with best practicable technology.

(3) For the purposes of this section “radioactive waste” includes spent fuel.

77. (1) A person shall not store, manage, transfer or dispose of radioactive waste without an authorization from the Authority.

(2) An application for an authorization to store, manage, transfer or dispose of radioactive waste shall be in the prescribed form and manner.

(3) Every authorized person shall take appropriate measures to keep generation of radioactive waste and its environmental impact to the minimum practicable.

(4) Any person who contravenes subsection (1) commits an offence, and is liable upon conviction to a fine not exceeding five million shillings or to an imprisonment for a term not exceeding five years, or to both.

78. (1) An authorized person shall ensure that —

(a) radioactive waste is collected, segregated, characterized and packaged at the point of origin in accordance with the classification and packaging system established under this Act;

Offences relating to radioactive waste and spent fuel.

Collection, segregation and characterization of radioactive waste.
(b) the selected radioactive waste packages are compatible with planned storage or disposal options and also meet the prescribed radioactive waste acceptance criteria; and

(c) the waste packages are designed and produced so that radionuclides are confined under both normal and accident conditions.

(2) In selecting a method of processing radioactive waste, an authorized person shall ensure that safety will be improved from the use of a matrix material and compatibility of the radioactive waste with the selected materials and processes.

79. (1) An authorized person shall ensure that radioactive waste from authorized activities is not discharged to the environment unless—

(a) such discharge is within the limits specified in the authorization and is carried out in a controlled manner using authorized methods; or

(b) the discharge is confirmed to be below the radioactivity clearance level prescribed by the Authority.

(2) An authorized person, during the operational stages of any nuclear material under his responsibility, shall—

(a) keep radioactive discharges below the authorized limits as is reasonably achievable;

(b) monitor and record the discharges of radionuclides with sufficient detail and accuracy to demonstrate compliance with the authorized discharge limits and to permit estimation of the exposure of the critical group;

(c) report discharges to the Authority at intervals as specified by the Authority and as may be determined from time to time; and

(d) report as soon as practically possible to the Authority of any discharges exceeding the authorized limits.

(3) Every authorized person shall ensure that non-radiological hazards of the released radioactive waste comply with the requirements of any other written law concerning those hazards.
(4) Every authorized person shall ensure radioactive waste is stored in such a way as to protect persons, property and the environment.

80. An applicant for an authorization for a radioactive waste and spent fuel management facility shall —

(a) meet safety requirements for the protection of persons, property and the environment by appropriate planning for the siting, design, construction, operation and maintenance of the respective facility, including provisions for eventual retrieval of the waste; and

(b) design the facility —

(i) on the basis of assumed conditions for its normal operation and assumed incidents or accidents;

(ii) for the likely period of storage, with the potential for degradation being taken into account;

(iii) in such a way that the waste can be retrieved whenever required;

(iv) so that it is adequately ventilated to exhaust any gas generated in normal conditions or under anticipated accidents conditions;

(v) so that measures to prevent, detect and control fires are incorporated as required; and

(vi) so that radiological monitoring and visual inspection is readily possible.

81. Radioactive waste and spent fuel generated outside the territory of Kenya shall not be imported into Kenya for any purpose.

82. (1) Radioactive waste and spent fuel generated within the Republic of Kenya may be exported only upon authorization by the Authority.

(2) Radioactive waste and spent fuel shall not be authorized for export to a destination south of latitude 60 degrees for storage or disposal.

(3) The Authority shall apply the following criteria in determining export authorization for radioactive waste and spent fuel, whether—

(a) the importing State has been notified of the transfer of radioactive waste and spent fuel prior to its receipt and has consented to such transfer;
(b) movement of the intended exported material shall be conducted in conformity with relevant international obligations in all States through which the material will transit; and

(c) the importing State possesses the regulatory infrastructure and technical capacity necessary to manage the exported radioactive waste and spent fuel.

(4) If an authorized export of radioactive waste or spent fuel cannot be completed in compliance with the provisions of this Act, the radioactive waste or spent fuel shall be re-imported into the Kenya unless alternative safe and secure arrangements can be made.

PART XIII—SAFEGUARDS

83. (1) All the nuclear material in Kenya shall be used exclusively for peaceful purposes and in accordance with this Act.

(2) No direct or indirect control of nuclear weapons and other nuclear related explosive devices, the manufacture or otherwise acquisition of such weapons or devices and the seeking of assistance in the manufacture of nuclear weapons or other nuclear related explosive devices, shall be allowed in Kenya.

(3) Any person who contravenes the provisions of subsections (1) or (2) commits an offence, and is liable upon conviction to a fine not exceeding ten million shillings or to imprisonment for a term not exceeding twenty years or to both.

84. (1) The Authority shall —

(a) ensure the implementation of the obligations of Kenya arising from ratified international treaties and conventions;

(b) collect and provide to the applicable international entity information required to fully implement Kenya's international and national obligations;

(c) facilitate entry into, access within the Republic of Kenya and offer necessary support to designated inspectors of the applicable international entity; and

(d) ensure all agencies of the Government of Kenya and authorized persons cooperate fully with the applicable international and national entities in application of safeguard measures.
(2) The Authority shall cooperate with the International Atomic Energy Agency in the implementation of the safeguards under this Part.

85. (1) An inspector of the Authority and a designated inspector of the applicable international entity shall have access to any facility or location as provided for under the safeguards regime with a view of conducting verification activities.

(2) Any person performing activities subject to the safeguards regime shall allow the Authority and designated inspectors of the applicable international entity to carry out any measures they consider necessary for achieving compliance with safeguard measures.

86. The Authority shall be responsible for approving the designation to Kenya of inspectors proposed by the applicable international entity.

87. The Authority shall make regulations to ensure the effective implementation of safeguards in Kenya by establishing and implementing—

(a) a system for the measurement of nuclear material;

(b) a system for the evaluation of measurement accuracy;

(c) procedures for reviewing measurement differences;

(d) procedures for carrying out physical inventories;

(e) a system for evaluation of unmeasured inventories;

(f) a system of records and reports for tracking nuclear material inventories and flows;

(g) procedures for ensuring that accounting procedures and arrangements are being operated correctly; and

(h) procedures of reporting to the applicable international entity.

88. Any person intending to carry out research and development activities related to the nuclear fuel cycle, shall prior to commencement, provide to the Authority information and data necessary for compliance subject to the Safeguards Agreement or any protocol thereto.
PART XIV—NUCLEAR SECURITY AND PHYSICAL PROTECTION

89. (1) The Authority shall co-ordinate threat assessment to be done by the national security institutions.

(2) Every authorized person shall ensure security measures are put in place in accordance with the threat identified under subsection (1).

90. (1) An authorized person is primarily responsible for ensuring the physical protection of nuclear material, radioactive material and related facilities under its control.

(2) Where there has been theft, threat of theft or loss of nuclear material, an authorized person shall —

(a) notify the Authority without delay of the incident and circumstances thereof;

(b) provide a written report, including particulars, to the Authority as soon as practicable after giving notice; and

(c) provide the Authority with any additional information as may be requested.

(3) The Authority shall issue guidelines on protection from attempted or actual unauthorized access of or illicit trafficking of nuclear and radioactive materials or sabotage of their associated facilities.

91. (1) In the event of an unlawful taking or threat of unlawful taking of nuclear material, the Authority shall take appropriate steps as soon as possible to inform other States that may be affected of the circumstances of the incident and the relevant international entity.

(2) The Authority shall be the lead authority responsible for co-ordinating recovery and response in the event of any theft or unlawful taking of nuclear material.

(3) In the event of an unlawful taking of nuclear material, the Authority shall be responsible for determining the necessary co-ordination, co-operation and assistance arrangements in the recovery and protection of such materials as agreed with any State or international organization that so requests.

(4) The Authority shall provide information on incidents involving unlawful taking of nuclear material, equipment and technology to the applicable international entity.
92. (1) A person shall not interfere with, remove, alter, damage, or render ineffective any security measures stipulated to secure nuclear or radioactive material except for lawful removal, transport or technical service.

(2) Any person who contravenes the provisions of subsection (1) commits an offence.

93. (1) Any information issued to or sought by the Authority under this Act is confidential and shall not be disclosed unless with the written authority of the Authority.

(2) An authorized person shall not disclose any information that is prejudicial to security of a nuclear facility or nuclear material unless with the written authority of the Authority.

(3) No person shall use information relating to the security of a nuclear facility or material for an unlawful purpose or to further an unlawful purpose or intent.

(4) A person who contravenes the provisions of this section commits an offence, and is liable upon conviction to a fine not exceeding five million shillings or to imprisonment for a term not exceeding five years or to both.

94. A person who uses or damages a nuclear facility, or interferes in whatever manner with its operation with the intent to cause death or bodily harm, damage to property or environment by compelling a person to do or refrain from doing an act commits an offence and is liable upon conviction to a fine not exceeding ten million shillings or to imprisonment for a term not exceeding twenty years or to both.

PART XV—MISCELLANEOUS PROVISIONS

95. An employer or principal shall be liable for an offence committed by an employee or agent under this Act, unless the employer or principal proves that the employee was not acting on instruction or authority.

96. Where a contravention of any of the provisions of this Act is made for which no fine or penalty is expressly stated, the person so defaulting shall, on conviction, be liable to a fine not exceeding one million shillings or to an imprisonment for a term not exceeding twelve months or to both.

97. The Director Public Prosecutions may, on the request of the Authority, gazette any officer of the
98. (1) The Authority shall, in consultation with the Cabinet Secretary, make regulations for the better carrying out of the objects of this Act.

(2) Without prejudice to the generality of subsection (1), such regulations may be made in respect of—

(a) the development, production and use of nuclear energy;

(b) mining, production, refinement, conversion, enrichment, processing, reprocessing, possession, import, export, use, packaging, transport, management, storage, or disposal of a nuclear material;

(c) design, inspection during production or installation, production, possession, storage, import, export, use, decommissioning, or disposal of prescribed equipment;

(d) production, possession, transfer, storage, import, export, use, disclosure or restriction of disclosure of prescribed information;

(e) applications for an authorization under this Act;

(f) design, siting, construction, installation, operation, maintenance, modification, decommissioning, abandonment or disposal of a nuclear facility or part of a nuclear facility;

(g) protection of persons, property and the environment, from any risks associated with the facilities and activities carried out under this Act;

(h) non-ionizing radiation exposure;

(i) doses of radiation, including —

(i) establishing classes of persons and prescribing, in respect of each class, the radiation dose limits to which members of that class may be exposed;

(ii) prescribing the circumstances under which any or all members of a class of persons may be exposed to a dose of radiation exceeding any of the limits prescribed for that class of persons; and

(iii) establishing measures for protection of persons from exposure to radiation;
(j) protection of nuclear energy works, including prescribing —

(i) duties that may be performed by a person employed in nuclear facility or other place in which a nuclear material is produced, used, possessed, packaged, transported, stored or disposed of and the manner and circumstances in which the person's terms and conditions of employment may be varied;

(ii) the information that a person so employed is required to provide to their employer or to a dosimetry service provider in order to measure or monitor the dose of radiation to which the person is exposed;

(iii) medical examinations or tests and the circumstances under which they are to be conducted on persons so employed; and

(iv) measures that must be undertaken by employers of persons so employed and licensees of such a nuclear facility;

(k) prescribing the fees that may be charged by the Authority, on information, products and services or for the programmes that it establishes and maintains;

(l) prescribing the fees payable for various authorizations;

(m) qualifications for, and the training and examination of, inspectors and other persons authorized under this Act;

(n) measures to ensure the maintenance of national security and compliance with Kenya's international obligations in the development, production and use of nuclear energy and the production, use, possession, packaging, transport, storage and disposal of nuclear materials, prescribed equipment and prescribed information;

(o) measures to implement Kenya's international obligations regarding the development, production and use of nuclear energy, including prescribing the manner in which the conditions under which access to a nuclear facility, nuclear material or prescribed information shall be granted to prescribed persons;
(p) establishing requirements to be complied with by any person who possesses, uses, packages, transport, stores or disposes of a nuclear substance or prescribed equipment or who locates, designs, constructs, installs, operates, maintains, modifies, decommissions or abandons a nuclear facility or nuclear-powered vehicle;

(q) the form of certificates of inspectors and designated officers;

(r) the procedure for certifications and decertification of prescribed equipment;

(s) establishing classes of nuclear facilities;

(t) the provision of any radiation protection services;

(u) radioactivity levels in foodstuff and consumer products;

(v) licensing process for export or import of controlled items, including end-user controls;

(w) the form of notices required by this Act and the manner in which they are to be given;

(x) the exemption of any activity, persons, class of persons or quantity of nuclear material, temporarily or permanently, from the application of this Act or the regulations thereunder; and

(y) prescribe anything that is required to be prescribed by this Act and generally any other matter necessary for carrying out the purposes of this Act.

PART XVI—TRANSITIONAL PROVISIONS

99. (1) The Radiation Protection Act, is repealed.

(2) Notwithstanding the provisions of subsection (1)

(a) in as far as applicable, the contractual obligations existing pursuant to the Radiation Protection Act shall be preserved;

(b) members of the former Radiation Protection Board and the Chief Radiation Protection Officer shall continue to serve in the Authority in the corresponding positions as members of the Board and Director-General respectively until the expiry of their unexpired term.
100. The Kenya Nuclear Regulatory Authority established under section 5 of this Act, shall be the successor to the Radiation Protection Board established by the Radiation Protection Act and subject to this Act, all rights, duties, obligations, assets, budget and liabilities of the Radiation Protection Board existing at the commencement of this Act shall be automatically and fully transferred to the Kenya Nuclear Regulatory Authority.

101. (1) A person who, immediately before the commencement of this Act, was an employee of the Government and who was serving at the former Radiation Protection Board shall, upon the commencement of this Act, be deemed to be an employee of the Authority.

(2) Despite subsection (1), all the employees of the Government who were serving at the former Radiation Protection Board shall upon the commencement of this Act be given an option to elect to serve in the Authority or be redeployed in the Public Service within a period of one year.

102. (1) In addition to the staff appointed under section 10, a public officer may be seconded to the Authority from any other public body, upon the request by the Authority as may be necessary for the performance of the functions of the Authority.

(2) A public officer seconded to the Authority shall, during the period of secondment, be deemed to be an officer of the Authority and shall be subject only to the direction and control of the Authority.
SCHEDULE

PROVISIONS AS TO THE CONDUCT OF BUSINESS AND AFFAIRS OF THE BOARD

1. (1) The Chairperson or a member of the Board other than an ex-officio member shall, subject to the provisions of this Schedule, hold office for a period of three years, on such terms and conditions as may be specified in the instrument of appointment, but shall be eligible for re-appointment for one further term.

(2) The members of the Board shall be appointed at different times so that the respective expiry dates of the members’ terms of office shall fall at different times.

2. (1) No person shall be appointed or shall, as a member of the Board if such person is—

(a) a member of parliament or a county assembly; or

(b) a person who holds any office or position, in a political party.

3. (1) A member of the Board other than an ex-officio member may—

(a) at any time resign from office by notice in writing to the Cabinet Secretary;

(b) be removed from office by the Cabinet Secretary on recommendation of the Board if the member—

(i) has been absent from three consecutive meetings of the Board without its permission;

(ii) is adjudged bankrupt or enters into a composition or scheme of arrangement with his creditors;

(iii) is convicted of a corruption or economic crime or other criminal offence involving dishonesty, fraud or moral turpitude or any other criminal offence under any law punishable with imprisonment that amounts to a felony under the Laws of Kenya;

(iv) is of unsound mind or is incapacitated by prolonged physical or mental illness for a period exceeding six months; or

(c) is otherwise unable or unfit to discharge his functions.
4. (1) The Board shall meet at least once in every three months.

(2) Notwithstanding subparagraph (1), the Chairperson may, and upon requisition in writing by at least five members, convene a special meeting of the Board at any time for the transaction of the business of the Board.

(3) Unless three quarters of the total members of the Board otherwise agree, at least fourteen days’ written notice of every meeting of the Board shall be given to every member of the Board.

(4) The Chairperson shall preside at every meeting of the Board and in his absence, the members present shall elect one of their number, from among the members appointed under the section 8, to preside and the person so elected shall have all the powers of the chairperson with respect to that meeting and the business transacted thereat.

(5) Unless a unanimous decision is reached, a decision on any matter before the Board shall be by a majority of the votes of the members present and voting, and in case of an equality of votes, the Chairperson or the person presiding shall have a casting vote.

(6) Subject to subparagraph (4), no proceedings of the Board shall be invalid by reason only of a vacancy among the members of the Board.

(7) Nothing in this paragraph shall prevent the Chairperson from authorizing a member of the Board to use live telephone conferencing or other appropriate communication or multimedia facilities to participate in any meeting of the Board where, prior to the meeting, the member, by notification to the Chairperson, has requested for such authorization.

5. (1) The Board may establish such committees as it may deem appropriate to perform such functions and responsibilities as it may determine.

(2) The Board shall appoint the Chairperson of a committee established under subparagraph (1) from amongst its members.

(3) The Board may where it deems appropriate, co-opt any person to attend the deliberations of any of its committees.

(4) All decisions by the committees appointed under subparagraph (1) shall be ratified by the Board.
6. (1) The secretary to the Board shall be responsible to the Chief Executive Officer for —
   (a) arranging the business of the Board’s meetings;
   (b) keeping records of the proceedings of the Board;
   (c) performing such other duties as the Board may direct.

   (2) The Board may in the absence of the secretary appoint any member of the Board or staff of the Authority to temporarily perform the functions of the secretary under subparagraph (1).

7. (1) A member of the Board who has an interest in any contract, or other matter present at a meeting shall at the meeting and as soon as reasonably practicable after the commencement, disclose the fact thereof and shall not take part in the consideration or discussion of, or vote on, any questions with respect to the contract or other matter, or be counted in the quorum of the meeting during consideration of the matter.

   (2) A disclosure of interest made under subparagraph (1) shall be recorded in the minutes of the meeting at which it is made.

   (3) A member of the Board who contravenes subparagraph (1) commits an offence and is liable to a fine not exceeding two hundred thousand shillings.

8. Any contract or instrument which, if entered into or executed by a person not being a body corporate, would not require to be under seal may be entered into or executed on behalf of the Authority by any person generally or specially authorized by the Board for that purpose.