

THE ATOMIC ENERGY ACT, 2002

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THE UNITED REPUBLIC OF TANZANIA



No. 7 OF 2003

I ASSENT

Benjamin W. Mkapa.....I

President

23rd May 2003.....

An Act to establish the Tanzania Atomic Energy Commission and to provide for its functions in relation to the control of the use of ionizing and non ionizing radiation sources, the promotion of safe and peaceful uses of atomic energy and nuclear technology, and to repeal the Protection From Radiation Act, 1983.

ENACTED by the Parliament of the United Republic of Tanzania.

PART I
PRELIMINARY

1. This Act may be cited as the Atomic Energy Act, 2003 and shall come into operation on such date (hereinafter referred to as the appointed day) as the Minister may, by notice published in the *Gazette*, appoint.

2.- (1) In this Act, unless the context requires otherwise:

„accident" means any unintended event including operating errors, equipment failures or other mishaps, the consequences or potential consequences of which are not negligible from the point of view of protection or safety;

"administer ionizing radiation" means an intentional act of subjecting ionizing radiation to persons for the purpose of medical treatment or diagnosis by a qualified expert whether it be internal or external ,

"appointed day" means the date on which this Act came into operation;

Short title
and com-
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ment

Interpre-
tation

- "approved medical practitioner" means a medical practitioner responsible for the medical surveillance of workers who are liable to receive a dose greater than three tenths of the annual maximum permissible dose, whose capacity to act in this respect is recognized by the Commission;
- "apparatus" means equipment associated with the emission of radiation;
- "article" means item or thing or equipment associated with emission of radiation;
- "atomic energy" means ionizing radiation emitted as a result of electronic or nuclear transitions in an atom;
- "authorization" means a permission granted in a document by the Commission to a legal person who has submitted an application to carry out a practice or any other action described in the general obligations for practices under this Act. The authorization can take the form of registration or a licence;
- "authorized officer" means an officer appointed or authorized to perform any functions in relation to the enforcement of the provisions of this Act, and includes a police officer;
- "Board" means the Board of the Commission as provided for in the Schedule to this Act;
- "Commission" means the Tanzania Atomic Energy Commission established under section 5 of this Act;
- "continuous exposure" means external or internal exposure where the source of radiation subjects the body or any critical organ to prolonged exposure or internal exposure due to continuous intake;
- "Director-General" means the Director-General of the Commission;
- "disease" includes injury and bodily or mental deficiency or abnormality;
- "disposal" means the emplacement of waste in an approved, specified facility (e.g. near surface or geological repository) without the intention of retrieval. Disposal may also include the approved direct discharge of effluents (e.g. liquid and gaseous wastes) into the environment with subsequent dispersion;
- "dose" means a measure of the radiation received or "absorbed" by a target;
- "dose equivalent" means a quantity used by the International Commission on Radiation Units and Measurements (ICRU) in defining the operational quantities ambient dose equivalent, directional dose equivalent and personal dose equivalent;

- "dose limit" means the value of the effective dose or the equivalent dose to individuals from controlled practices that shall not be exceeded;
- "effective dose" means a summation of the tissue equivalent doses, each multiplied by the appropriate weighting factor;
- "emergency plan" means a set of procedures to be implemented in the event of a radiation accident;
- "equivalent dose" means the quantity $H_{T,R}$ defined as $H_{T,R} = \sum D_{T,R} W_R$ where $D_{T,R}$ is the absorbed dose delivered by radiation type R averaged over a tissue or organ T and W_R is the radiation weighting factor for radiation type R;
- "exposure" means the act or condition of being subjected to irradiation;
- "external exposure" means the act or condition of being subjected to irradiation by a source outside the body;
- "facility" means any assembly of devices, equipment, structures or natural features whether simple or complex which serves some purpose or performs some function, in the course of which radiation is, or is capable of being emitted;
- "former Commission" means the National Radiation Commission established under section 5 of the Protection From Radiation Act, 1983 (the repealed Act);
- "ionizing radiation" means the radiation of gamma rays and x-rays or corpuscular radiation, capable of producing ions directly or indirectly in its passage through matter;
- "internal exposure" means the act or condition of being subjected to irradiation by a source inside the body;
- "licensee" means a person holding a licence granted under this Act;
- "Minister" means the Minister for the time being responsible for matters relating to Atomic Energy and nuclear technology;
- "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;
- "44 nuclear safety" means the condition and ability of a nuclear installation and its servicing personnel to prevent the uncontrolled development of a fission chain reaction or an inadmissible release of radioactive substances or ionizing radiation into the environment, and to reduce the consequences of accidents;
- "nuclear installation" means a nuclear fuel fabrication plant, nuclear reactor (including critical and sub critical assemblies), research

- reactor, nuclear power plant, spent fuel storage facility, enrichment plant or reprocessing facility;
- "physical protection" means a system of technical and organizational measures preventing unauthorized activities with nuclear installations, nuclear materials and selected items;
- "plant" means and includes any machinery, facility or installation, whether affixed to land or not, but does not include any thing comprised or to be comprised in any means of transport, whether by land, water or air;
- "Practice" means any human activity that introduces additional sources of exposure pathways or extends exposure to additional people or modifies the network of exposure pathways from existing sources, so as to increase the exposure or the likelihood of exposure of people or the number of people exposed;
- "premises" means and includes any land, whether built up or not, including any place underground and any land covered by water;
- "qualified expert" means an individual who by virtue of certification by appropriate boards or societies, professional licence or academic qualification and experience, is duly recognized by the Commission as having expertise in a relevant field of specialization e.g. medical physics, radiation Protection, occupational health, quality assurance Or any relevant engineering or safety specialty;
- 66 radiation" means and includes both ionizing and non ionizing radiation;
- "radiation accident" means any occurrence or succession Of occurrences having the same origin, which results into the release of radioactive materials, or radiation doses, which exceeds the safety standards prescribed in this Act or the regulations;
- 66 radiation protection" means a system of technical and organizational measures to reduce or limit exposure of people and the environment;
- "Radiation Safety Officer" means an officer appointed under subsection (1) of section 57 of this Act;
- "Radiation Safety Inspector" means any person appointed under subsection (1) of section 9 of this Act to Perform radiation inspections and any other duties relating to inspections under this Act;
- „radioactive material" means any matter or substance containing one or more radionuclides the activity or concentration of which is sufficiently intense to entail a significant risk or disability or

- disease to any person or organ on exposure;
- "radioactive waste" means some material that contains or is contaminated with radionuclides at concentrations or activities greater than exemption levels as established by the Commission and for which no use is foreseen;
- "sealed source" means a source consisting of radioactive material firmly incorporated in a solid of effectively inactive materials, or sealed in an inactive container of a strength sufficient to prevent, under normal conditions of use, any dispersion of radioactive material and any possibility of contamination;
- "single exposure" means external exposure where the source of radiation subjects the body or organ to exposure of short duration, or internal exposure following the intake of radionuclides over a short period;
- "source" means an apparatus, device, material or anything capable of emitting radiation;
- "undertaking" means and includes any trade, practice, business or profession and in relation to a public or local authority, includes any of the powers or duties of that authority, and, in relation to any other body of persons, whether corporate or incorporate, includes any of the activities of that body;
- "user" means a person or body of persons or institution authorized under this Act;
- "using radiation" means and includes possession, holding, storage, transporting, importing, exporting, installing, purchasing, selling or applying radiation in any activity:

- (1) in determining, for the purposes of this Act, whether any radioactive material is kept or used on any premises, no account shall be taken of any radioactive material kept or used in or on any vehicle, vessel or aircraft if either:
 - (a) the vehicle, vessel or aircraft is on those premises in the course of journey; or
 - (b) in the case of a vessel which is on those premises otherwise than in the course of a journey, the material is used in propelling the vessel or is kept in or on the vessel for use in propelling it,
- (2) any substance or article which, in the course of the carrying on

of any undertaking, is discharged, discarded or otherwise dealt with as if it were waste shall for the purposes of this Act, be presumed to be waste unless the contrary is proved;

(3) any reference in this Act to be the contamination of a substance or article shall be construed as a reference to its becoming radioactive or possessing increased radioactivity as a result of its being so affected by either or both of the following, that is to say:

- (a) absorption, admixture or adhesion of radioactive material or radioactive waste; and
- (b) the irradiation by neutrons and other ionizing radiation.

Applica-
tion

3. This Act shall apply to Mainland Tanzania as well as Tanzania Zanzibar in respect of all persons or body of persons whose undertakings involve or include generally the use of atomic energy and nuclear technology and in particular the production, processing, handling, use, holding, possessing, storage, transport and disposal of natural and artificial radioactive materials and radiation devices in respect of any other activity which involves a risk or harm arising from radiation.

Exemp-
tion
exclu-
sions and
clearance

4-0) Nothing in this Act shall apply to any material or use of any material, which contains radioactivity of less than 3,700 Becquerels and if there is no portion on it in which the concentration exceeds 74 Becquerels per gram of material.

(2) This Act shall not apply to ionizing radiation generators of a type approved by the Commission and any electronic tubes such as cathode ray tube for the display of visual images, provided that: -

- (a) they do not cause in any normal operating conditions an ambient dose equivalent rate or a directional dose equivalent rate, as appropriate, exceeding (1.0 microsievert per hour at a distance of 0.1 metre from any accessible surface of the apparatus; or
- (b) the maximum energy of the radiation produced is not greater than 5 KeV

(3) Sources including substances, materials and articles within notified or authorized practices may be exempted from further requirements

of this Act subject to complying with clearance levels approved by the Commission.

(4) Any exposure whose magnitude or likelihood is essentially unamenable to control through the requirements of this Act is deemed to be excluded from the application of this Act.

(5) Save as is provided for in this Act, the Minister may, upon the recommendation of the Commission, by order published in the *Gazette*, exempt from the operation of any of the provisions of this Act any person or body of persons using any material which contains radioactive substances of more than the prescribed limits, or for any other reason or reasons as may deem fit.

PART 11

THE TANZANIA ATOMIC ENERGY COMMISSION

5--(1) There is hereby established a body corporate to be known as the Tanzania Atomic Energy Commission which shall seek to regulate the safe and peaceful use of atomic energy, promote and expand the contribution of atomic energy and nuclear technology to health and prosperity throughout the United Republic of Tanzania and shall:-

Establish-
ment of
the Com-
mission

- (a) have perpetual succession and common seal;
- (b) in its corporate name be capable of suing and being sued;
- (c) subject to this Act, be capable of purchasing and otherwise acquiring or disposing any movable or immovable property and of entering into such contract as may be necessary or expedient for the performance of its functions under this Act or any other written law.

(2) There shall be the Board of the Commission to which the provisions of the Schedule to this Act shall have effect as to its constitution and procedure and to other matters in relation to it.

(3) The Board shall exercise such powers for the carrying out of such activities as are necessary, advantageous or proper for regulating the safe and peaceful use of atomic energy, promoting and expanding the use of atomic energy and nuclear technology.

(4) Without prejudice to sub-section (3), the Board shall primarily oversee, monitor, regulate and supervise the implementation by the secretariat of the functions prescribed under section 6 of the Act.

(5) Save for the provisions relating to the appointment of the Chairman, the Minister may, by order published in the *Gazette*, amend, add to, vary, revoke or replace any of the provisions of the Schedule.

Functions
of the
Commis-
sion

6.-(I) The Commission shall:-

- (a) be responsible to all matters relating to the safe and peaceful use of atomic energy and nuclear technology including radioactive materials and radiation devices, with a view to ensuring the promotion of their applications and the Protection of workers, patients and the public generally from harm resulting from radiation;
- (b) advise On Policy issues and Provide information in the light of currently available knowledge on the proper, safe and peaceful uses of atomic energy and radiation sources, the possible hazardous effects, and the appropriate methods for enhancing the Protection Of workers, patients, the public generally and the environment from harm by radiation;
- (c) establish or adopt, in consultation with competent bodies inside and outside the country, standards of safety for the protection of health and the minimization of danger to life and property and to provide for the application and supervision of these standards in all undertakings or Practices involving the use of atomic energy and radiation sources;
- (d) establish and operationalize or implement a system for the control and authorization through registration and licensing of the importation, exportation, movement, Possession or use of atomic energy and radiation sources;
- (e) establish, promote or adopt guidelines upon which its regulatory actions are based;
- M review and assess submissions on safety from the operators both prior to authorizations and periodically during operation as required;
- (9) provide procedures for Issuing) amending, suspending or revoking authorizations subject to any necessary conditions, that are clear and unambiguous and which shall specify the necessary elements as may be Provided in the regulations;
- (h) carry out regulatory inspections and ensure that corrective actions are taken if unsafe or Potentially unsafe conditions are detected;
- (i) take the necessary enforcement action in the event of violations of safety requirements, which actions include the closure of any radiation related services or radiation Premises;

- 0) exercise regulatory control over all matters relating to non ionizing radiation;
- (k) co-ordinate and make provision for, or carry out, or facilitate the carrying out, through the establishment or designation of institutions, the development or practical applications of atomic energy and nuclear technology for safe and peaceful purposes, including the production of electric power using nuclear reactors, with due consideration of the safety and needs of the nation;
- (l) prioritize and provide for, or carry out, or facilitate and co-ordinate the carrying out of, applied research designed to facilitate the evaluation, development or practical applications of atomic energy and radiation sources for safe and peaceful purposes, and of the modern methods for the control and minimization of the harmful effects of radiation exposure to workers, patients, the public generally and the environment;
- (m) establish and operate a system for the registration of, and the dissemination of information relating to research findings under this Act and to promote the practical applications of those findings for the purposes of advancing the peaceful and more advantageous use of atomic energy and radiation sources in the United Republic, and the effectual protection of workers, patients, the public and the environment from radiation harm;
- (n) formulate and implement programmes for the training of persons to become qualified experts in the development and practical applications of atomic energy, nuclear technology and the use of radiation sources and radiation protection;
- (o) hold or facilitate the conducting of seminars, workshops or short training courses including Public education for the safe and peaceful uses of atomic energy and nuclear technology;
- (P) promote national and international co-operation or collaboration on the applications of atomic energy and nuclear technology already introduced or intended for introduction in the United Republic;
- (q) liaise with ministries and the appropriate institutions in order to facilitate the incorporation into the syllabi of all relevant and appropriate knowledge in nuclear science and technology for the practical applications of atomic energy and the related safety and protection during utilization;
- (r) foster and facilitate the exchange of scientific and technical in

- formation, and the training of scientists and experts in the field of peaceful uses of atomic energy, nuclear technology, radiation Protection, nuclear safety and waste management;
- (s) establish and operate or facilitate the establishment and operation of a system for the control of radioactivity in foodstuffs, animal feeds and the environment; and for the management of radioactive waste emanating from various atomic energy and nuclear technology applications;
 - (t) acquire or establish any facilities, plant or equipment useful in carrying out its authorized functions, and to solicit or facilitate the soliciting of funds for the purposes;
 - (u) advise the Government on the administration Of the International Atomic Energy Agency Safeguards and other related International Nuclear Agreements, Protocols, Conventions and Treaties;
 - (v) formulate and Operate a national radiological emergency plan and Preparedness;
 - (w) inspect any radiation Practices or radiation Premises and where there is a breach of safety standards, order the closure of such Practices or premises or take action for locking the Premises;
 - (x) do anything or enter into any transaction which in the opinion of the Commission is calculated to facilitate the Proper exercise of its functions.

(2) The Commission may appoint such committees as it deems necessary for the Purpose of advising it on matters relating to its functions, Provided that the advice offered shall not relieve the Commission of its responsibility for making decisions and recommendations.

(3) The Commission may carry Out research Programmes on the promotion of peaceful use of atomic energy and nuclear technology at such places and at such times to be determined by it.

(4) For the Purposes of carrying out its functions, the Commission shall be deemed to be the controller of each and every license, or authorization which may be required by or under this Act in relation to any matter connected with the radiation protection of persons and the environment and the development and use in the United Republic of atomic energy and nuclear technology for safe and peaceful Purposes.

(5) For Purposes of the better Performance Of its functions, the Commission shall establish and maintain a system Of consultation and co

operation with any organization, institution, person or body of persons established by or under any written law, whether or not in the United Republic of Tanzania, whose functions are related to those of the Commission or whose participation or collaboration in the work of the Commission or any of its programmes is likely to advance the better and more effective furtherance of the objects and purposes of this Act.

7.-(I) There shall be appointed by the President of the United Republic a Director-General of the Commission who shall be a qualified expert in atomic energy and nuclear technology matters and who will serve for a term of five years and shall be eligible for re-appointment.

Appoint-
ment and
duties of
the Direc-
tor Gen-
era]

(2) The Director-General shall be responsible to the Board for the proper administration and management of the functions and affairs of the Commission in accordance with the policy laid down by the Commission.

(3) Notwithstanding the provisions of subsection (1), the President may on his own motion or upon the recommendation of the Commission remove the Director-General from that post on any reasonable or sufficient cause or causes.

(4) Further to the appointment made under subsection (1) of this section, the Commission may advise the Minister to make further provisions for the establishment of Directorates, and appointment of its Directors.

8.-(I) There is hereby established a Secretariat of the Commission which shall subject to this Act be the executive, technical and administrative organ of the Commission.

The
Secre-
tariat

(2) The Director-General shall head the Secretariat and shall be the Secretary to the Board.

(3) If the Director-General is absent from the United Republic for a period exceeding three months or incapacitated by reason of illness or for any other reason is unable to perform his duties for a period exceeding three months, an officer within the Secretariat shall be appointed by the Board to act in the place of the Director-General during any such period of absence from duty.

(4) the Secretariat shall perform the day to day activities of the Commission and keep under review the progress made in the Performance of the Commissions functions and the attainment of the objects and Purposes of this Act.

The staff
Of the
Secretariat

9.-(1) The Commission may from time to time appoint and employ On such terms and conditions as the Commission may determine such Officers and employees as may be necessary for effective Performance Of its functions.

(2) The Commission may engage either temporarily or on such terms as it may think fit Persons who are experts in atomic energy and nuclear technology, subject to such other written laws.

Powers to
appoint

10. The Commission may, subject to such conditions as it may impose, engage any person or body of persons to facilitate the appointment Of such officers or employees of the Secretariat.

PART III

CONTROL OF THE USE OF IONIZING RADIATION SOURCES AND INSTALLATIONS

a. Prohibitions relating to the control Of ionizing radiation sources and installations.

Prohibition on
the use,
Possession,
export,
Storage or
transport
of
ionizing
radiation
sources

11-0) Except as Provided otherwise in this Act, no person shall On or after the appointed day, in Pursuance of his undertaking use, possess' export' store or transport any 'ionizing radiation sources unless he is licensed and registered as such in accordance with the provisions of this Part.

(2) Any Person who contravenes, fails or refuses to comply with the provisions of subsection (1) Of this section, shall be guilty of an Offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term Of not less than three Years or to both that fine and imprisonment and the court. convicting him may, in any appropriate case, in addition to the fine or Imprisonment imposed, make an Order for the forfeiture of the source in question.

12- (1) No person shall cause ionizing radiation to be applied to any person for the purpose of diagnosing or treating a disease unless the application is prescribed by a medical practitioner or dentist registered or licensed under any written law.

Prohibition on administering ionizing radiation to persons

(2) No person shall administer ionizing radiation to another person unless the person administering it is in possession of a valid licence issued or registered under this Act.

(3) Any person who contravenes or willfully fails or refuses to comply with any of the provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than five hundred thousand shillings or to an imprisonment for a term of not less than six months.

13. (1) Except as provided otherwise in this Act, no person shall on or after the appointed day, in the furtherance of his undertaking install, use or possess any plant or apparatus designed for:

Prohibition on the use and possession of plants and apparatus

- (a) the production or use of atomic energy; or
- (b) the carrying out of any process which is preparatory or ancillary to the production or use of atomic energy and which involves or is capable of causing the emission of radiation; or
- (c) the accumulation, storage, processing or disposal of radioactive waste regardless of their origin unless he is registered or licensed for that purpose in accordance with the provisions of this Part.

(2) For the purposes of this section, installation of a plant shall include the adaptation of any plant, facility, apparatus or any part of it in order to achieve any of the purposes or obtain any of the effects specified in subsection (1) of this section.

(3) Any person who contravenes, or willfully fails or refuses to comply with any of the provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than three

years or to both that fine and imprisonment, and the court may, in addition to the fine or imprisonment imposed, make an order for the forfeiture of the plant or the apparatus in question.

Prohibition on importation of nuclear installations

14- (1) Except as provided otherwise in this Act, no person shall after the appointed day, import or cause to be imported into Tanzania any nuclear installation, material, plant or other apparatus which is intended to be made into a source of radiation, unless he has previously complied with the provisions of this Part which relate to importers and the importation of nuclear installations, and as such radiation devices to be imported shall comply with the specifications set out by the Commission.

(2) For the purpose of this section, the importation of an article, substance, material or part of an apparatus which, on being incorporated into or fixed, attached or connected to any existing plant or installation, would result in making the plant or installation a source of ionizing radiation, shall be deemed to be importation of a nuclear installation.

(3) Any person who contravenes, or willfully fails or refuses to comply with any of the provisions of this section shall be guilty of an offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than three years or to both that fine and imprisonment, and in addition to the fine or imprisonment imposed, a court may make an order for the forfeiture of the nuclear installation in question.

Prohibition on operation of nuclear installations

15.-(I) No person shall operate or hold himself as qualified and capable of operating any apparatus, facility, plant or installation or any part of any apparatus, facility, plant or installation, which is or consists of a source or sources of ionizing radiation unless he is a qualified expert and is duly registered as such in accordance with the provisions of this Part.

(2) No user shall employ, permit or otherwise cause any person who is not a qualified expert to operate any plant, installation or apparatus, or any part of which constitutes his undertaking.

(3) Any person who contravenes or fails to comply with any of the Provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than five hundred thousand shillings or to imprisonment for a term of not less than six months or to both that fine and imprisonment.

b. Provisions relating to authorization.

16. Prior to the granting of an authorization, the applicant shall be required to submit a detailed demonstration of safety, which shall be reviewed and assessed by the Commission in accordance with clearly defined procedures whereas the extent of the control applied shall be commensurate with the potential magnitude and nature of the hazard presented.

Submis-
sion of
detailed
demon-
stration
of safety

17.-(I) Every person wishing to import, export, store or transport or whose business consists of the importation, exportation, storage or transportation of any apparatus, article, plant, installation or other material or substance which is a source or is intended to be used for the purposes of an undertaking involving the emission of radiation, shall do so only after securing a licence issued to him by the Commission under this section.

Licensing
Of impo-
rters,
exporters
and
transporters

(2) A licence may be issued under this section upon an application being made to the Commission in the prescribed form and payment of prescribed fees.

(3) The licence issued under this section shall be in the prescribed form and shall contain such particulars in relation to the licensee and the article or other material to be imported as may be prescribed by the Commission.

(4) In considering whether or not to grant an authorization under this section, the Commission shall take into account the number of persons individually importing sources of radiation, and in the case of an applicant who is a user, whether he has fulfilled any requirements prescribed in respect of such applicants by the Commission.

(5) The Commission may issue a licence under this section subject to such conditions or limitations as it may deem fit or necessary to impose in any particular case and shall prescribe in the *Gazette* the requirements to be met by the licensee or the applicant.

(6) Any applicant shall be required to fulfill all the requirements Prescribed by the Commission by order in the *Gazette*.

Licensing
of users

18.-(j) Any Person intending to become a user shall be required to secure a licence issued to him by the Commission under this section permitting him to do so.

(2) The provisions of section 17(2), (3) and (5) of this Act shall also apply to applications for and the grant of licenses under this section.

(3) A licence shall not be granted under this section to any person other than a body of Persons corporate or incorporate, and shall not be transferable.

(4) A licence granted under this section shall expire upon a specified period and may be renewable after fulfillment of the safety requirements Prescribed by the Commission.

Authori-
zation of
qualified
experts

19--(1) Every person intending to carry out a Practice that involves the administering Of ionizing radiation to persons, shall before doing so acquire a registration or a licence from the Commission allowing him to administer ionizing radiation for the Purpose of diagnosing or treating a disease.

(2) The Commission shall, in consultation with competent bodies, establish a system for the authorization of qualified experts to administer ionizing radiation to persons, and in doing so the Commission may require such persons to perform qualifying tests in radiation protection by the Commission or institutions designated by it.

Registra-
tion of
mobile
ionising
radiation
devices

20.-(I) With effect from the appointed day, no person shall:-

(a) keep, or cause or permit to be kept, mobile ionising radiation devices of any description for the Purpose of its being used in the delivery by him of services to which this section applies; or

(b) use, lend or let on hire, or cause or Permit to be used, lent or let on hire, mobile ionising radiation devices of any description in the course of the delivery by him of any such services, unless he is registered under this section in respect of that apparatus or is exempted from registration under section 21 in respect of mobile ionising radiation devices of that description.

(2) Every application for registration under this section shall be made to the Commission, specifying the mobile ionising radiation devices to which the application relates, and the nature of the services to which this section applies in the course Of which the apparatus is to be used, lent or let on hire, and containing such other information as the Minister may, by regulation, Prescribe.

(3) Where an application is made to the Commission for registration under this section in respect of any apparatus, the Commission may register the applicant in respect of that device, either unconditionally or subject to such limitations or conditions as the Commission may see fit, or may refuse the application.

(4) Where the Commission has granted an application for the registration of any person under this section in respect of any mobile 'Onising radiation device, the Director-General shall furnish him with a certificate containing all material particulars of the registration.

11-0) The Commission is hereby exempted from registration under section 19 of this Act in respect Of any mobile ionising radiation device of every description that may come into its Possession or under its control in the course of the performance of its functions, under sections 17 and 18 in respect Of import, export, transport, transit, use or Possession respectively

Exemption from registration and licensing

(2) No person or body of persons shall apply for registration or licensing as a Person using ionizing radiation if the activities of his undertaking involve the use of.

- (a) radioactive substances of a concentration of less than 74 Becquerels per gram for unsealed sources, the limit being increased to 3,700 Becquerels per gram for sealed sources;
- (b) navigation instruments or timepieces containing radio luminescent paint, but not their manufacture or repair except as provided for in paragraph (a);
- (c) a device emitting Ionizing radiation and containing radioactive substances in amounts greater than the values specified in Paragraph (a), Provided that it:-
 - (i) is of a type approved by the Commission;
 - (ii) Possesses advantages in relation to the potential hazard of the ionizing radiation it emits such that, in the opinion of the Commission, justifies its use;

(iii) it does not cause at any Point situated at a distance of a tenth of a metre from the accessible surface of the device and under normal operating conditions, a dose rate exceeding one microsievert per hour.

(3) The Minister may, upon the advice of the Commission, by order published in the *Gazette*, grant further exemptions from registration under this Part, by reference to such categories of persons, and such descriptions of radioactive substances and mobile ionising radiation devices, as he may specify in the order.

(4) Except as Provided for under subsection (1), any exemption under this section may be granted or confirmed subject to such limitations or conditions as may be specified by the Ministe,

Liability
of
Licensee

22,-(I) Every Licensee to whom this section applies shall be responsible for ensuring that no radiation emitted as a result of the carrying on of his undertaking on his Premises, cause any harm or injury to any person or damage to any Property which is on the Premises or elsewhere subject to subsection (4) of this section.

(2) No person other than the licensee to whom this section applies shall be under any liability in respect of any harm to any person or any damage to any Property caused by any radiation to which subsection (1) applies.

(3) No Licensee shall incur any liability by virtue of subsection (1) in respect of any radiation whose emission, or the causing of any harm to any person or any damage to any property by their emission, is attributable to hostile action in the course of civil strife, any armed conflict, including any armed conflict within the United Republic of Tanzania.

(4) Whenever a physical or mental disability occurs in a person, and which an approved medical Practitioner:

- (a) ascribes to radiation exposure, the disability shall be Presumed to have resulted from, exposure to radiation from a source of strength sufficient to give rise to such disability;
- (b) ascribes to radiation as well as to other causes, the following factors shall be considered for the Purposes of establishing the cause of the disability, namely:

- (i) if the disability is of a nature known to be capable of being caused by either radiation or any other cause and it appears that the person may have been exposed to a source of radiation of a strength sufficient to have caused the disability, it shall be presumed that the disability, arose from one or more of such exposures if no record of personal exposures have been maintained to a standard approved by the Commission;
- (ii) if the disability is of a nature known to be capable of arising from radiation and from any other possible cause, and there exists a personal radiation exposure record in respect of that person which indicates that there have occurred in relation to him exposures in excess of the recommended dose limits, it shall be presumed that the disability occurred as a result of that radiation exposure;
- (iii) if the disability is of a nature known to be capable of arising from radiation and from any other possible cause, and there exists a personal radiation exposure record in respect of that person which has been maintained to a standard approved by the Commission, it shall be presumed that the disability did not arise from radiation exposure if the record indicates that the exposures have been within the permissible limits on all possible occasions of exposure.

23.-(I) Subject to the provisions of this Act, every licence issued under this Part may be modified in its terms, suspended or revoked.

Modifica-
tion, sus-
pension
and revo-
cation of
licence

(2) The Minister shall make regulations providing for the circumstances and occasions on which a licence may be modified, suspended or revoked, and for the consequences of each of those events, and the procedure for the appeal against the decision made under this section, shall be the one provided for under section 26(3) of this Act.

c. Provisions Relating to Records

24.-(I) The Director-General shall keep and maintain a register in which all records of users shall be kept.

Register
of users
and mo-
bile de-
vices

(2) The register kept by the Director-General shall be in the prescribed form in which he shall enter and maintain such particulars in relation to users as the Commission may prescribe.

(3) Any person intending to use or administer ionizing radiation shall be required to submit his particulars to the Commission for verification before registering him under this Act.

(4) The Director-General shall, at least once in every calendar year, publish in the Gazette the Particulars as he may deem fit in respect of every Person whose records are kept in the register.

(5) Where an authorization granted to any person under this Part Permitting him to use Ionizing radiation is revoked, the particulars of that person shall be deleted from the register.

(6) The Director-General shall cause to be kept and maintained a register Of mobile devices.

Register
of
qualified
experts

25--(I) The Director-General in collaboration with any competent institution shall keep and maintain a register of qualified experts operating apparatus, installations and plants in undertakings owned by a user.

(2) As soon as Practicable after the Commission has accepted the application of any person for registration as a qualified expert under this section, the Director-General shall enter in the register in respect of that person such particulars as the Commission may by resolution prescribe.

(3) The provision of sub-section (2) of this section shall also apply to persons undertaking repairs, maintenance and installation of radiation devices, plants, and apparatus.

(4) All changes in the particulars registered under subsection (2) of this section, shall be entered in the register by the Director-General.

(5) The Director-General may, with the general or specific approval of the Commission rectify any clerical error, in the register or other document containing "tracts from the register.

Removal
or varia-
tion of
particu-
lars

--(I) The Commission may, for the purpose of this Act, at anytime remove or vary particulars of any user from the register and assign reasons.

(2) The Commission may, on canceling or varying particulars under this section, give notice to that person.

(3) Any person aggrieved by the cancellation or variation of his particulars from the register may within sixty days appeal to the Minister whose decision on the matter shall be final and conclusive.

27. Every user shall have the duty to keep records of his practice in a format prescribed by the Commission.

Duty to keep records

PART IV

CONTROL OF RADIOACTIVITY IN FOODSTUFFS

28. The provisions of this Part shall be read together with the Tanzania Food, Drugs and Cosmetics Act, 2003.

The Tanzania Food Drugs and Cosmetics Authority Act, No. I of 2003

29. Save as is provided for under this Act, the Commission shall, in consultation with the Tanzania Food and Drugs Authority and other competent institutions, establish a system designated for the control of radioactivity in foodstuffs.

System for the control of radioactivity in foodstuffs

30. It shall be a requirement under this Part of this Act for any manufacturer, importer and exporter of foodstuffs specified in relevant regulations to obtain a radioactivity analysis certificate from the Commission before the said food is imported into the country or exported out of the country or distributed for human and animal consumption.

Requirement for radioactivity analysis

31.-- 1) The system, as established under section 29 of this Act, shall ensure that exports and imports of food is stuffs are screened or analysed for radioactive materials contamination imported into the country or exported or distributed for human and animal consumptions.

Analysis for radioactive materials

(2) The Commission shall analyse and issue a radioactivity analysis certificate in respect of every food sample representing the consignment in question.

contamination

Act No. 1
of 2003

(3) Where the Commission is of the opinion that the foods analysed - is not fit for human consumption, due to the detected high levels of **radio activities**, it shall forward the radioactivity anal - consideration and final decision to the Director-General of the Tanzania Food and Drugs Authority established by the Tanzania Food, Drugs and Cosmetics Act, 2003.

(4) All customs and Port authorities at all entry and exit points in collaboration with the Commission and the Tanzania Food and Drugs Authority, shall bear a responsibility to ensure compliance Of this Act.

PART V

RADIATION PROTECTION, PHYSICAL PROTECTION, NUCLEAR SAFETY,
RADIOACTIVE WASTE MANAGEMENT AND EMERGENCY PREPAREDNESS

Duty to
ensure
safety

32. It shall be the duty of every user to monitor measure, verify and 'cord values, Parameters and facts with an impact on nuclear safety, radiation Protection, physical Protection and emergency Preparedness, to the extent laid down in the regulations made under this Act.

Accumu-
lation of
radioac-
tive waste

33.-(I) Subject to the provisions of this Part, with effect from the appointed date, no person shall, except in accordance with an authorization granted in that behalf under this Part, accumulate, with a view to subsequent disposal, any radioactive waste on any Premises which are used for the Purposes of an undertaking carried on by him, or cause or permit any radioactive waste to be so accumulated, if he know or has reasonable grounds for believing it or be radioactive waste

(2) For the Purpose of this section, where radioactive material is Produced, kept or used 0, any Premises, and any substance arising from the Production, storage or use of that material is accumulated in a part of the Premises appropriated for the Purposes, and is retained there for a period of three or more months, that substance shalt unless the contrary is Proved, be presumed:

- (a) to be radioactive waste, and
- (b) to be accumulated on the premises with a view to its subsequent disposal

Disposal
of
radioac-
tive waste

34.-(I) Subject to the provisions Of this Part, as from the appointed day, no Person shall, except in accordance with an authorization granted

in that behalf under section 35 of this Act, dispose of any radioactive waste on or from any Premises which were used for the purposes of an undertaking carried on by him, or cause or permit any radioactive waste to be so disposed of, if he knows or has reasonable grounds for believing it to be radioactive waste.

(2) Where any Person keeps any mobile radiation device for the purpose of its being used in the provision of services to which section 20 of this Act applies, he shall not, on or after the appointed day, dispose of any radioactive waste arising from any such apparatus so kept or cause or permit any such radioactive waste to be disposed of, except in accordance with an authorization granted in that behalf under this Part.

(3) Where on or after the appointed day any person, in the course of carrying on an undertaking, receives any radioactive waste for the purpose of its being disposed of, he shall not, except in accordance with an authorization granted in that behalf under this Part, dispose of that waste, or cause or permit it to be disposed of, knowing or having reasonable grounds for believing it to be radioactive waste.

(4) The disposal of any radioactive waste shall not require further authorization, if it is waste, which falls within the provisions of an authorization granted under subsection (1) or (2) of this section.

35.-(I) The power to grant authorizations under section 33 or 34 in respect of the accumulation or disposal of radioactive waste on or from any Premises used for any undertaking by any user shall be exercisable by the Commission.

(2) Before granting its authorization, to which sections 33 and 34 relate, the Commission shall consult with local authorities, water utilization, river basin or other public authorities as appear proper.

(3) An authorization may be granted either in respect of radioactive waste generally or in respect of such one or more descriptions of radioactive waste as may be specified in the authorization, and any such authorization may be granted subject to such limitations or conditions as the Commission may impose on granting that authorization.

(4) Upon granting an authorization, the Director-General shall:-

(a) furnish the person to whom the authorization is granted with a

Authority
of accu-
mulation
and dis-
posal of
radioac-
tive waste

certificate containing all material particulars of the authorization;
and

- (b) unless, for reasons of national security, it is in the opinion of the Commission necessary that knowledge of the authorization be restricted, send a copy of the certificate to local authority in whose area the radioactive waste is to be disposed of or accumulated, and to any other public or local authority consulted in relation to the application for the grant of the authorization.

Revoca-
tion or
variation
of autho-
rization

36.-(I) The Commission may at any time, either on its own mo_ tion, or on the directions of the Minister, revoke or vary any authoriza_ tion granted under this Part and assign reasons.

(2) Upon the revocation or variation Of an authorization, the Commission shall give notice to the person to whom the authorization was granted, and if a copy of the certificate of authorization was sent to any local authority, shall send a copy of the notice to that local authority.

Facilities
for safe
manage-
ment of
radioac-
tive waste

37.-(I) The Commission shall require the Licensee to obtain ad-
equate facilities for the safe management of radioactive waste.

(2) There shall be established a Central Radioactive Waste Manage-
ment Facility known by its acronymy as CRWMF which shall serve as
a National Centre for the collection, characterization, conditioning, seg-
regation and generally the safe management of radioactive wastes.

(3) Where the Commission Proposes to arrange for the safe manage-
ment Of radioactive waste, at a CRWMF or disposal, it shall, before
carrying out such undertaking, consult with any local or Public author-
ity in whose area of jurisdiction the place would be situated.

(4) The Commission may, after consultation with the Minister, make
charges for the use of any facilities established under subsection (2) of
this section.

(5) If there is radioactive waste on any Premises and the Commis-
sion is satisfied that the waste Ought to be disposed of but by reason of
the Premises being unoccupied, or the Occupier being absent or insol-
vent, or for any other reason it is unlikely that the waste will not be
lawfully disposed of unless the Commission exercises its Powers under
this subsection, the Commission may dispose of that radioactive
waste as it deems fit.

38. The normal exposure of individuals shall be restricted so that neither the total effective dose nor the total equivalent dose to relevant organs or tissues caused by the possible combination of exposures from authorized practices exceeds any relevant dose limit specified in regulations made under this Act. Dose limits
39. Prior to the establishment of a nuclear installation by any person or body of persons, the Commission shall ensure, that an appropriate system is put in place to ensure nuclear safety and physical protection. Nuclear safety and physical protection
40. The Minister shall after consultation with the Commission make and Publish regulations in the *Gazette* requiring persons or categories of users to make provisions either by insurance or by such other means as may be specified, for the purposes of making available at all times funds sufficient to cover any claims which may be established against those persons as licensee, in respect of any injury to any person or damage to any property caused by radiation emanating from the activities of their undertakings. Licensee's liability
- 41--(I) The Director-General upon consultation with the Board, shall make and publish in the *Gazette* rules relating to emergency preparedness and, in particular, the procedure and manner of dealing with the accidents involving radiation sources or in connection with the use of sources in any premises or an occurrence of any such class or description as may be prescribed. Radio-logical emergency preparedness
- (2) Without prejudice to the generality of the power conferred by subsection (1) of this section, the rules may include provisions regarding:
- (a) the reporting and the procedure for the reporting the occurrence;
 - (b) the person or persons to whom the report is to be made;
 - (c) consequences on any person of not reporting the occurrence;
 - (d) the inspection of the premises where the occurrence had happened;and
 - (e) matters connected with legal proceedings resulting from such occurrences.
- (3) Every authorized person shall notify the Commission and any relevant intervening institutions promptly when a situation requiring protective action has arisen or is expected to arise and shall keep them informed of.-