Decree of the President of the Supreme Council for Environment and Natural Reserves No. (4) of 2003 on the issuance of the Executive Regulations of Law No. (31) of 2002 on Radiation Protection No. 4/2003

Number of Items: 101

Subject Index

Chapter Two (85-99)

Control & Inspection (85-99)

The President of the Supreme Council for Environment and Natural Reserves, after reviewing the amended Interim Statute, in particular Article (34) thereof, Decree-Law No. (11) of 2000 establishing the Supreme Council for Environment and Natural Reserves, Law No. (31) of 2002 on Radiation Protection, and Amiri Decree No. (29) of 1996 Regarding the decisions of the Council of Ministers submitted to the Amir for ratification and issuance, and the approval of the Council of Ministers on this draft resolution in its ordinary meeting No. (27) of 2003 held on 9/7/2003, it decided as follows:

Release Materials

Article 1

The provisions of the Executive Regulations of Law No. (31) of 2002 on Radiation Protection annexed to this Decree shall apply.

Article 2

All competent authorities, each in his own capacity, shall implement this decision. It shall come into force from the date of its issuance. It shall be published in the Official Gazette.

Chapter One

Definitions and Scope of Application

Chapter One

Definitions

Article 1

In the application of the provisions of these Regulations, the following words and phrases shall have the meanings set forth in their respective contexts, unless the context requires otherwise:
Council: The Supreme Council for Environment and Natural Reserves.
Chairman: The President of the Council.
Secretary-General: The Secretary General of the Council.
General Secretariat: The General Secretariat of the Council.
Committee: Radiation Protection Committee.
Law: Legislative Decree No. (31) of 2002 on Radiation Protection.
Radiation: Ionizing and non-ionizing radiation.
Ionizing Radiation: All charged or neutral particles or electromagnetic rays that directly or indirectly ionize matter when it falls on it, including alpha and beta particles, neutrons, electrons, gamma radiation, and X-rays.
Non-ionizing radiation: All types of radiation that do not directly or indirectly ionize matter when it falls on it, such as laser beams.
Radiation Protection Inspector: A person authorized by the President, on the recommendation of the Secretary-General, to carry out inspections of institutions and installations in possession of radioactive materials, sources or radioactive devices, or that are engaged in radiation work in any way.
Radiation Protection Officer: A qualified technician appointed by the competent authority, department, or employer in institutions and establishments that use radioactive sources, to supervise the application of prescribed radiation protection systems, and to assist in providing advice in this field.
Radiation worker: A person who works permanently in a field that involves ionizing radiation, or performs work that requires his or her presence in a place where radioactive sources are used.
Radioactive source: Any physical entity that can cause radiation exposure due to its release of some type of ionizing or non-ionizing radiation or due to the release or leakage of radioactive materials.
Radioactive matter: The material from which ionizing radiation can be emitted, such as alpha or beta particles, gamma radiation and neutrons.
Radiation Source Device: A device that does not contain any radioactive material, but in which operations are carried out to obtain ionizing or non-ionizing radiation.
Radiation Accident: Any type of accident accompanied by radiation hazards that threaten public health and safety and result in actual or potential exposures.
Practice: Any activity or group of interrelated activities with a single goal, in which one or more radioactive sources are used, and the performance of which exposes humans or the environment to the dangers of ionizing radiation.
License: A permit granted by the Council or the competent authority based on a safety assessment accompanied by specific requirements and conditions, to which the licensee is bound
.Licensee: Any natural or legal person who owns radioactive sources or practices radiation, and

has obtained the necessary licenses.
Registration: A form of authorization for practices involving low or medium risk, where the natural or legal person responsible for the practice has prepared and submitted to the Board as appropriate a facility and equipment safety assessment, and the safety assessment requirements and conditions applicable to the practice are lower than those required for the licence.
Registrar: A natural or legal person who has been granted a registration for a radiological practice or for the possession of a radioactive source that involves little or medium risk.
Controlled area: A workplace where a radiation worker may receive radiation exposure in excess of three-tenths (0.3) of the dose equivalent limit.
Limit: The limit used for radiation protection purposes, which is the value of a specific amount used for radiation exposure purposes and must not be exceeded.
Waste: Any solid, liquid or gaseous substance resulting from the handling or handling of radioactive materials, and containing or contaminated radioactive isotopes, at concentrations or radioactive activities greater than the permissible levels, and is not expected to have any use.
Description: Indicate the physical, chemical and radiological properties of the waste, in order to determine the need for modification, treatment and configuration processes, or their suitability for subsequent handling, treatment and storage.
Solid waste: Any solid object produced by or comes into contact with radioactive material during work and operation in laboratories, laboratories, etc., which leads to its contamination with radioactive material that is difficult to remove as it becomes unfit for repeated use.
Effluents: Any water-based liquid or organic or inorganic solvents that contains certain concentrations of radioactive substances as a result of their different uses and applications.
Gaseous waste: Gases and vapors containing radioisotopes that accumulate as a result of the processing of burnt nuclear fuel, or escalate during the processing of nuclear ores, as well as transcendent radioactive materials such as radioactive iodine, uranium halogens, or any other radioactive gases or vapors released as a result of the work.
Permissibility levels: The set of values determined by the Committee, expressed in terms of concentrations of radioactivity, total radioactivity, or both, at which point or without the radioactive sources may be released from regulatory control.
Configuration: Processes that produce a waste package suitable for handling, transportation, storage or disposal.
Waste formula: Waste in its physical or chemical form after treatment and preparation, which results in a solid product, before packaging, and is a waste disposal compound.
Waste container: The container in which waste formulas are placed for handling, transporting, storing or final disposal of waste, which is a waste disposal vehicle.
Disposal: Waste is placed in a designated approved facility (i.e. in a near-surface cemetery or in geological formations) with no intention of recovering it. Disposal may also involve the approved direct discharge of flows into the environment as they subsequently spread.
Monitoring: Measurement of radiation or radioisotopes for reasons related to the evaluation or monitoring of radiation exposure and the interpretation of such measurements. Monitoring may be continuous or non-continuous.
Quality control: All planned and regular work necessary to provide confidence that any subject, process or service, meets the specific requirements in terms of quality, for example those specified in the license.
Cemetery: A facility where waste is placed for disposal and is not recovered from it in the future.

Storage: Placing radioactive waste in an appropriate facility for isolation, environmental protection, monitoring or monitoring, with the intention of recovering such waste for allowing, processing, preparation or late disposal.
Remediation: Processes by which the properties of waste are altered, intended to increase safety or economic benefits with a view to reducing the size, removing radioisotopes from waste, or changing the composition.
Waste Stock Record: Detailed records of all items maintained by the operator or board in accordance with these Regulations, which contain data such as the physical quantity, radioactivity of the waste, the content of radioisotopes and other characteristics.
Waste generator: Any natural or legal person who engages in activities that generate radioactive waste.
Waste management: All administrative and operational activities involved in the handling, treatment, preparation, storage and disposal of waste. Transportation is taken into account.
Waste Disposal: A configuration product that includes the waste formula and any container or containers and internal barriers, such as absorbents and liners, and is prepared in accordance with the requirements of handling, transporting, storage and disposal.

Chapter Two

Scope of application

Article 2

The provisions of this Regulation shall apply to all practices that involve or could involve exposure to ionizing radiation or radioactive sources, including the following: 1. The production of sources, the extraction and processing of radioactive ores, and the use of radioactive materials or materials for medical, industrial, agricultural, training, scientific or other purposes, including any activities related to such use that involve or could involve exposure to radiation.2. Practices involving the presence of natural radioactive sources Any other practice determined by the Council that involves a risk resulting from: (a) occupational exposures, (c) exposure to the general public, (d) possible exposures, (e) chronic exposures, (f) emergency exposures, and (4) intervention in the event of a radiation emergency or in the case of chronic exposure. 3. Radiation caused by radioactive materials in raw materials in their natural concentration.4. Any other sources that may be determined by the Council.

Article 3

Exemptions: The Board may, upon a request submitted to it and with the approval of the Committee, grant an exercise or source that falls within a practice an exemption from the requirements set forth in these Regulations if the following conditions are met: 1. The radiation hazards resulting from the practice or source to individuals are so small as to render them insignificant from a regulatory point of view.2. The cumulative radioactive impact of the exempted practice or source is so small that it does not require regulatory control.3. The exempt practice and sources are self-safe.

Article 4

Principles of Prevention: No practice or sources that fall within the scope of a practice may be licensed, unless the Board deems it justified, such as the possibility that it will result in a benefit to exposed individuals or society sufficient to compensate for the radiation damage it may cause, taking into account social, economic, health and other relevant factors. Practices in which food, beverages, cosmetics, or any other commodity or product intended for human use are inserted orally, inhaled, skinned, or topically. 2. Practices that result in the unwise use of radiation or radioactive materials in certain goods or products, such as toys, ornaments, and personal decorations.

Article 5

Dosage Limits:
Normal exposure to individuals shall not exceed the total effective dose or total equivalent dose of any exposed organ or tissue, resulting from the accumulation of doses from all prior exposures, to the dosage limits established by the Committee. Dosage limits do not apply to medical exposures resulting from licensed practices.

Article 6

Ideal prevention and safety: Except for therapeutic medical exposures, optimal prevention and safety should be achieved by keeping the amount of individual dose, the number of people exposed and the likelihood of exposure reasonably minimized, taking into account economic

and social factors. Meet the standards of prevention and safety when adopting engineering procedures and controls. 4. Benefit from the acquired experiences and developments.

Chapter Two

Licensing and Inspection

Chapter One

Licensing

Article 7

Basic Obligation: Without the authorization of the Board, any of the following acts and practices may be carried out: 1. Import, export, possession, circulation or transfer of radioactive materials.2. Apply, import, conduct, modify, discontinue or terminate any acts or practices involving radioactive materials, sources or devices.3. Design, manufacture, produce, possess, possess, import, export, purchase, sell, deliver, receive, loan, borrow, or Operate, discharge or dispose of any radioactive materials, sources or radiation-emitting devices.4. Select any site to practice any work that includes a radioactive material, source or radiation-emitting device, or construct any buildings for such practice or work, or make any modifications to the places or buildings referred to. 5. Work with ionizing or non-ionizing radiation, or in the field of expertise and responsibility for radiation protection.

Article 8

Application for a License:
Every natural or legal person who intends to carry out any of the acts, practices or activities stipulated in Article (7) of these Bylaws shall submit to the Board an application on the form prepared for this purpose, to obtain the necessary license to work, practice or possess the radioactive source before proceeding with any of them. Practices for which reporting is the sole requirement and can be initiated immediately after reporting.

Article 9

Types of Licenses: In the field of radiation protection, the Council shall issue the following licenses: 1- Personal license for individuals to practice work in the various fields of radiation, 2- Institutional license, including the license of the site, the facility, and the practice.

Article 10

Personal License: A personal license is for natural persons, and includes a license to practice radiological work for professional purposes such as medicine, engineering, pharmacy, industry, research, and other professions and fields of functional work within the framework of which radiological work is involved, including transportation, storage, and circulation arising from commercial operations.

Article 11

Institutional License: The institutional license is for legal persons, and includes their license to possess, use, trade and transfer radioactive sources and radiological devices, or establish, own, operate and manage nuclear or radiological facilities and facilities. Nuclear fuel. Accelerators and nuclear research laboratories, radiopharmaceutical factories and radioactive sources. The appropriate place for diagnosis or radiation therapy and nuclear medicine facilities shall be licensed in coordination with the Ministry of Public Health with regard to the requirements and conditions of the license.2- Facility License: Nuclear or radiological facilities and facilities that are constructed or rented to practice any type of radiation work in them are licensed, such as research laboratories in which radioactive sources or radiation devices are used, radiation pharmacy laboratories, clinics and hospitals where radioactive materials or radiation devices are used, accelerators, radiators, nuclear reactors, and places Storage of radioactive materials, facilities or drains of radioactive waste.The license of health facilities such as clinics and hospitals in which radioactive materials or sources are used shall be in coordination with the Ministry of Health in relation to the requirements and conditions of the license.3- Practice License: In which the operation or use of any nuclear or radiological facility, any radioactive material, or radiology device or the use thereof in any way is licensed, such as the provision of inspection services without damage, the use of ionizing radiation for industrial purposes, and the operation of accelerators, reactors, factories, mines, laboratories and laboratories that The license to practice activities related to medical radiological applications shall be by the Ministry

of Public Health, in coordination with the Council with regard to the requirements and conditions of the license.

Article 12

Registration: The Board may only register some practices that involve low or medium risks when the following conditions are met: 1. Significant safety through the design of facilities and equipment, and 2. Ease of implementation of operating procedures.
3. The need for minimal security training.4. Operating logs contain few security issues.5. Operations are not substantially different.

Article 13

Licensing of Major Nuclear Facilities: The procedures for licensing large nuclear facilities, such as nuclear research reactors, nuclear power plants, nuclear fuel plants, and the like, shall be issued by a decree of the President.

Article 14

Steps and procedures for obtaining other licenses: The procedures for obtaining licenses referred to in Article (9) of this Regulation shall be as follows: 1- Personal License: The applicant for a license shall apply to the General Secretariat on the form prepared for this purpose, to obtain a personal license to practice radiological work. 2- Institutional License: A- Site License: The institution wishing to acquire and use radioactive or radioactive facilities shall submit an application to the General Secretariat on the form prepared for this purpose, indicating the type of work, the type of radioactive sources or radioactive devices and facilities to be constructed, their geographical locations, and their purpose, and a detailed feasibility study of the project if requested by the General Secretariat. In respect of which the license is issued within a maximum of one month from the date of referral of the application to it, and in the event of the rejection of the license, the refusal must be reasoned and notified to the concerned parties.b- Facility License: The Corporation shall submit an application to the General Secretariat on the form prepared for this purpose, after obtaining the site license, to obtain a license for the construction of a new radiological facility, or for a license to use

radioactive materials or radioactive sources, or both in existing facilities, together with all information, documents and engineering designs for the project. Studying the application and the attached documents, verifying the conditions established for the license and issuing the appropriate recommendation to the Secretary-General thereon, in which the license shall be issued within a maximum of one month from the date of referral of the application to him. The Secretariat shall study the application and the documents attached thereto, verify the conditions established for the license, including conducting the necessary examinations and measurements it deems appropriate and issue the appropriate recommendation to the Secretary-General, who shall issue the final license within a maximum of one month from the date of the application being referred to him in its final form. The General Secretariat shall have the right to return the license applications submitted to it to persons or institutions to complete the deficiencies or make such amendments or additions as it deems necessary before recommending to the Secretary-General the granting of the license.

Article 15

Grievance: A natural or legal person whose license is refused in accordance with the provisions of the preceding article may appeal against the decision to the Secretary-General within one month of being notified of the rejection, and the grievance shall be decided, after taking the opinion of the Committee, within one month of receiving the grievance, and the Secretary-General's decision in this regard shall be final.

Article 16

Dates for applying for a license: Applications for the licenses stipulated in this section shall be submitted within the following period:1- Personal license:
within a period of not less than two weeks before the date on which the license applicant wishes to start work.2- Site license: three months prior to the date on which the establishment wishes to obtain such a license.3- Establishment license: A period before the date on which the establishment wishes to start construction and installation, ranging from one month for small establishments to four months for large establishments.4- Practice License: Two months before the date on which the Corporation wishes to start benefiting from and using the facility and operating the radiological devices therein.5- License to import, export or transport radioactive materials:
At least one week before the date of practicing the required activity for radioactive materials with a long half-life and used for non-medical purposes.6- License to import or transport radioactive materials with a short half-life and are used for medical purposes: At

least one day before the date of receipt of the radioactive material, and in cases of extreme necessity, the application may be submitted on the same day that the Foundation expects to receive the radioactive material.

Article 17

Documents required to obtain the license: The license applicant is obliged to submit his application on the form prepared for this purpose, attaching the following documents:1- For the personal license: a- The license applicant's CV including qualifying progression, career progression and experience.b- An approved medical report on the health status and health history of the license applicant.c- A report on the qualification processes (study, courses, workshops) that the license applicant has passed to work in the field in which he wishes to obtain a license.d- Any other documents that the General Secretariat deems necessary to complete 2- For the site license: a- A report on the nature and volume of the radiation work to be done at the site to be licensed.b- A report on the site in terms of geological composition, potential natural resources, land plans and the location of the facility in these plans, and a preliminary engineering plan for the facility.c- A report on the size of the labor expected to be used at the site, their specializations, qualifications and experience.d- A report on the auxiliary services and their availability, emergency plans and physical protection for the facility to be established at the site.3- For the license of the facility: A detailed report on the facility to be established, including engineering plans and designs, and the places of use and storage of radioactive devices and materials.b- A report on the devices and materials to be used in the facility and the extent to which they comply with the principles of radiation protection and the periodic specifications decided by the Board.c- A report on the radiation protection systems and needs in the facility.d- A report on the nature and size of the expected radioactive waste in the facility, its chemical composition and physical condition, and the methods of handling and disposing of it.4- Regarding the license to practice: Without prejudice to the issuance of the Ministry of Public Health for the practice license for activities related to medical radiological applications in coordination with the Council, the documents required for this license and other practice licenses shall be as follows: a. A detailed report on the activity to be practiced in the facility, such as operation, management, use, trade, trading, industry, research, and others. A detailed report on the size and type of radiation level of the radioactive materials and sources to be used, a report on the impact of the practice to be licensed on the environment, a report on the persons who will practice radiological work, a report on the radiation protection system and personal and environmental radiation dosimetry services, and a report on the contingency plans of the facility where the practice will be conducted.

Article 18

Cancellation or Amendment of the License: The license shall be revoked in the following cases:1- If it is found that the Licensee has provided incorrect data or resorted to illegal methods, which will result in the issuance of the license.2- If the Licensee violates any of the conditions stipulated in the Law, these Regulations or the decisions issued thereunder.3- If the Licensee suffers from an illness that renders him unable to work with ionizing radiation.4- If it is found that there is a danger to the environment, the Licensee, or its employees, The Board may approve the amendment of the license, if the nature of the work or the type of licensed practice changes, or if the place of business specified in the license application changes.

Article 19

Notification of New Cases: The Licensee shall notify the Board in advance of the following: 1- The date of commencement of the experiments prior to the operation of the licensed facility, if such experiments use ionizing radiation.2- The date of the commencement of the operation of the licensed facility or the conduct of a practice using radioactive sources.3- Any change in the conditions of the practice of work, and any cessation of work.

Article 20

Termination of Possession of Resources: No person licensed to possess radioactive sources may dispose of them permanently, transfer them to another person, or lend them to him, without obtaining a license to do so from the Board.

Article 21

Requirements for Licenses to Work in the Fields of Radiological Work: The Chairman, upon the recommendation of the Committee, shall issue the requirements for the licensing of workers in the various fields of radiation work.

Chapter Two

Inspection

Article 22

Inspection of Establishments and Access to Information: Every natural or legal person in possession of a radioactive source shall permit judicial officers and those in charge to inspect the facilities in which such sources are dealt with in accordance with the provisions of Article (16) of the Law, for the purpose of obtaining information on the extent to which that person complies with the provisions of the Law, this Regulation and the executive decisions necessary for the implementation of the Law and the requirements of prevention and safety. The Board shall be provided with information and records relating to prevention and safety, in particular with regard to the storage and use of the source.

Article 23

Duties and Inspection Dates: The radiation protection inspectors in the Council referred to in the previous article may carry out inspection tours without prior notice to anyone who owns any radioactive source or practices radiation, to verify the availability of radiation protection precautions and systems stipulated in the law or issued by the committee, provided that they take into account the safety conditions of each facility. Periodic inspection.3- In response to a request from the concerned institution or one of its employees.4- Emergency and radiological accidents.5- Verifying the obtaining of the necessary license and controlling unauthorized cases.6- Ensuring the existence of radiation protection precautions, records and other disclosures.7- Any other cases that the Council deems relevant to the implementation of the provisions of the Law and this Regulation.

Article 24

Inspection Instructions: A decision shall be issued by the President regarding the inspection instructions for persons and establishments, which shall include the conditions to be met by the inspector, the duties and powers of the inspectors, and the methods of inspection.

Chapter Three

Prevention of radiation exposures

Chapter One

Prevention of occupational exposures

Article 25

General Provisions: No person may be employed in the fields of ionizing radiation, or any other work related to it, unless his scientific and technical qualifications have been verified, and he has been medically examined to verify his health fitness, in accordance with the conditions set by the Council. Radiation exposure from normal working hours, which may only be increased for an absolute necessity, provided that this does not exceed the limits of occupational exposure.

Article 26

Radiological Work Zones: The
Licensee shall divide the areas surrounding radioactive devices or radioactive sources into two categories: observation areas and supervision areas, and the Licensee shall periodically review the working conditions for the purpose of determining what may be necessary to modify the preventive measures or safety arrangements, including the boundaries of the control areas and the supervision areas. These areas shall be classified as follows: 1. Observation Areas: Special control zones shall be established in places where workers may be professionally exposed to doses that may exceed three-tenths of the limits of any of the equivalent, effective or occupationally induced doses determined by the Committee. and periods of exposure by appropriate means. (b) Establish the approved warning signs and any other appropriate instructions at the possible points of approach to the controlled areas and at various locations suitable for the interior thereof. c. Adopt all occupational protection and safety measures, including local rules and methods appropriate to each control area.d. Monitor the approaches to the controlled areas by administrative means such as entry and work permits, installation of barriers and doors, and the placement of locks, and the intensity of the surveillance must be commensurate with the nature of the potential hazards, especially the provision of protective clothing and the necessary equipment when needed.2. Supervision Areas: The licensee shall designate supervision areas, which are areas where the conditions of occupational exposure

need to remain under review, even if Taking into account the nature and magnitude of the radiological hazards in the control areas, the licensee is obliged to: a. Demarcate the boundaries of these areas by appropriate means, and b. Establish approved markings at the appropriate points of entry leading to them.

Article 27

Requirements for Service Conditions:
No person may be used or exposed in radiological work conditions where the annual radiation exposure is likely to exceed three-tenths (0.3) of the dose equivalent limit, if under the age of eighteen, except for training purposes only and under the direct supervision of the licensee. dose, if under the age of 16.

Article 28

Requirements for pregnant women: Every working woman who may be exposed to radiation must inform the employer of her pregnancy as soon as she becomes aware of it.

Article 29

Local Rules of Supervision: The Licensee shall be obliged to follow the following rules in respect of supervision: 1. Nominate a person responsible for radiation protection to be called a Radiation Protection Officer, and a decision shall be issued by the President on the instructions of the Radiation Protection Officer.2. Develop, in cooperation with the Radiation Protection Officer and in consultation with the employees if necessary, the necessary local rules and procedures shall be established in writing and in a language that is understood by the employees and the general public, and shall communicate these rules and procedures to the employees and other persons who may be affected by them. Employees should be provided with adequate information about the health risks resulting from their occupational exposure, whether normal or probable, and provide them with adequate instructions and training in the areas of prevention and safety. 4. Educate workers whose nature of work requires entering controlled areas or supervision areas, about the risks to the fetus as a result of the exposure of pregnant women, and the importance of the worker informing the licensee as soon as she

becomes aware of the presence of a pregnancy. 5. Provide appropriate information, instructions, and training to employees related to the contingency plan. 6. Maintain records of the training received by each worker.

Article 30

Dose limits in radiation exposures: Radiation exposures for workers, the general public and in medical applications shall be monitored, so that they do not exceed the limits set by the committee in the light of technical studies and international rates in this field.

Article 31

Monitoring of Workplaces: The Licensee shall prepare and implement a program for monitoring the premises of the premises, and shall maintain its continuity, in order to achieve an appropriate and adequate degree of protection and safety for workers, the public, and the environment, and shall achieve the following: 1. Assessment of exposures in the areas subject to control and supervised, 2. Evaluation of radiation conditions in the work environment, and 3. Revision of the classification of work areas. 1- The type of measurements, such as the dose rate of different radiations, surface pollution, and the concentration of radioactive materials in the air.2- The measurement methods used, and the name of the person who carried them out.3- The reference levels approved by the competent authority, and the measures taken when exceeding them.

Article 32

Radiation measurements: Persons responsible for radiation protection shall make the following measurements in each area, and document all results in special records:1. Conduct a routine survey to validate the classification of the area.2. Conduct measurements of the radiation exposure rates associated with the operation of the device for all employees in the area who may be exposed to radiation doses.3. Place and periodically take dosimetry, such as those carried by employees, such as illustrations and films, in the workplace.

Article 33

Individual Monitoring: Licensees and radiation protection officers must ensure the following:
1. Each worker in a control area carries a radioactive dose meter, such as illustrations, films, etc.
2- Each worker maintains this scale in good condition.3- Each worker has been trained to use the scale and place it in the right place and in the right way.4- The readings of the scales for all employees are taken at specific periods and periodically, and the results are documented in special records.

Article 34

Obligations of the Licensee in the field of prevention of occupational exposures: The Licensee shall be obliged to: 1. Treat persons exposed to radiation doses in excess of the permissible limits approved by the Board, at its expense, provided that the cases requiring examination and treatment shall be determined by a special medical committee formed by the Minister of Public Health at the request of the Secretary-General. The provisions of the Labor Law shall be applied, without prejudice to the application of other relevant laws.2. Inform the Council or the Civil Defense Department by telephone and in the shortest possible period of time, in the event of any accident that has led or may lead to exposure to a radiation dose exceeding the limits of the permitted doses, or when any source of ionizing radiation is lost, damaged, or lost control of it, with clarification of the details of the accident and the reasons that led to its occurrence, provided that it does not exceed This period shall be within twenty hours of the occurrence of the accident, provided that the telephone notification shall be followed by the written notification to the Board within a period not exceeding three days.3. Drawing up drawings, signs, or warning inscriptions suitable for the monitored areas in the internationally recognized manner and according to the Warning Signs Booklet in Radiological Work issued by the Council or any other signals decided by the Council, in a clear and understandable manner, to indicate the magnitude and nature of the exposure hazard. 4. Establish a physical supervision program that specifies the nature of the precautions to be taken to verify compliance with the instructions for determining 5- Review the physical detection and supervision periodically in the light of the experiences and experiences gained, and in the event of any material modification of the nature, location, conditions or conditions of the work stipulated in the license application, the licensee shall inform the Board of this as soon as possible, and amend the radiation protection program in its establishment as the case may be. The health of its employees, and the continuous compatibility between the interest of the work and the health of the worker, and the provision of the necessary information thereon in cases of accidents and occupational diseases.7- Medical supervision of the employees of the

establishment in accordance with the general principles of occupational medicine, taking into account the conditions of previous or current exposure of these workers to toxic chemicals, and any other physical conditions that involve health risks.8- Not to use or continue to use any worker in work that involves exposure to ionizing or non-ionizing rays in violation of medical rules. 9. Verify that the occupational medical examination is conducted on the employees of the institution periodically, as well as in the event of any occupational injuries or diseases of its employees. 10. Provide the appropriate conditions for the medical supervisor approved by the Council or any other entity authorized to supervise the professional medical supervision, to carry out the supervision work, and provide the information requested by him, including the details of the job description of any worker in the establishment and his personal profile.

Article 35

Records: The Licensee shall be obliged to keep the following records:1- Records of radiation sources.2- Records of professional medical examination of employees in the establishment (a record for each worker), and the medical examination shall be through a medical center approved by the Council.3- Records of accidents, whether related to persons, devices or equipment.4- Records of radiation exposure of radiologists (a record for each worker). Such records shall be of a confidential nature and shall be organized and maintained for a period of not less than thirty years, unless the Secretariat decides otherwise. The worker's radiation exposure can be calculated at any time, and the following information should be recorded in it: 1- The worker's previous radiation history, including the radiation doses he was exposed to from all previous practices.2- The type of current work and the type of radiation to which he may be exposed as a result of the work, the classification of the area and the permissible limits for personal doses.3- The rate of doses that the worker was exposed to at work in his current job.4- The readings of the dose scales carried by the worker such as explanations, films, etc.5- The cumulative total. 6- The results of the periodic medical examinations conducted on the worker.
7. The radiation status of the worker, i.e. the average of the worker's total cumulative dose of all the radiation work he has performed in his working life.

Article 36

Rights of Radiation Workers: The radiation worker shall be granted additional leave and a radiation hazard allowance, commensurate with the size and nature of the danger to which he is exposed, in accordance with the controls and categories issued by a decision of the Council of Ministers, based on a proposal from the Council after coordination with the concerned

authorities in the State. These features are not a substitute for providing all radiation protection measures to workers.

Article 37

Exposure Assessment: The Licensee undertakes to make the necessary arrangements for the assessment of occupational exposure to the workers and verifies that appropriate arrangements have been made with the competent dosing authorities under an appropriate quality control program. The quality of radiation monitoring measurements and the calibration of equipment used must be confirmed periodically. The licensee shall identify workers who may be exposed to internal contamination, provide them with appropriate monitoring that achieves effective protection and correct assessment of indoor exposure doses.

Article 38

Personal Protective Equipment: The Licensee shall ensure that employees are provided with appropriate and adequate personal protective equipment, including, as appropriate, protective clothing, lead aprons, gloves, body body shields and protective equipment for surveillance, provided that employees are made aware of the protective features they provide. It is also committed to minimize reliance on PPE for prevention and safety purposes during normal operations by providing well-designed controls and appropriate working conditions.

Chapter Two

Prevention of medical exposures

Article 39

Responsibilities: The licensee shall ensure the following:1- No patient is exposed to any medical radiation exposure for diagnostic or treatment purposes unless such exposure is prescribed by a medical practitioner.2- The medical practitioner's commitment to achieve comprehensive prevention and safety for patients when prescribing and during medical radiation exposure.3- The medical practitioner verifies that the medical exposure to patients is

the minimum necessary to achieve the required diagnostic goal.4- The medical practitioner verifies the use of appropriate equipment and devices.5- Medical personnel and their assistants, as needed, provided that They are either health professionals or have received adequate training to perform the tasks assigned to them appropriately in the diagnostic or therapeutic procedures prescribed by the medical practitioner.6. Requirements for titration, dosimetry and quality assurance shall be established by or under the supervision of a qualified medical physicist when radiation is used in therapeutic aspects, including external radiation therapy and internal radiation therapy.7. Implementation of radiography and quality assurance requirements under the advice of a qualified expert either in radiodiagnostic physics or the physics of nuclear medicine, as the case may be, for the diagnostic uses of radiation. 8. The medical practitioner shall notify the Registrar or the Licensee of any deficiencies or needs related to compliance with radiation protection standards in terms of the prevention and safety of patients and take the necessary steps to ensure their protection.

Article 40

Justification of Medical Exposures: Medical radiation exposures should be justified by comparing the diagnostic or therapeutic benefits they provide with the radiation damage they may cause, taking into account the benefits and risks of available alternative techniques that do not involve medical radiation exposure, taking into account the following: 1. Relevant guidelines, such as those set out by the World Health Organization (WHO); 2. No radiation examination for professional, legal or health insurance purposes, regardless of clinical purposes; Unless it is confirmed that useful information is available about the health of the individual being examined.3. Not to conduct extensive radiological examination for population groups, unless the expected benefits for the individuals being examined or for the population as a whole are sufficient to offset the economic and social costs, including radiation damage to such examination.4. Not to expose humans to radiation in medical research, unless it conforms to the provisions of the Helsinki Declaration of the Eighteenth International Medical Meeting, and follows the guidelines for its application issued by the Council of International Medical Sciences Organizations, the World Health Organization and any national medical body designated by the Council.

Article 41

Diagnostic Exposure Prevention Requirements: Licensees shall verify the following:1. Patients' medical diagnostic exposures are at the lowest reasonably achievable level, subject to the rules of acceptable image quality as determined by the competent professional bodies, and the

relevant medical exposure guidelines.2. Consider conducting reviews if doses exceed the guidelines set by the Committee.3. Consider relevant information from previous examinations to avoid conducting Additional examinations are unnecessary.4. The medical practitioner, technologist or other imaging staff chooses the conditions of imaging, including the number of images, parts or organs to be photographed, etc., so that the combination of these results in the minimum radiation exposure to the patient, consistent with the required quality of the images and the clinical purpose of the examination, especially when children are photographed.5. Avoid radiological examinations that cause exposure to the abdomen or pelvis of a pregnant or likely pregnant woman, unless there are reasons 6- Any diagnostic examination of the abdomen or pelvis of the woman capable of giving birth should be planned so that it results in the lowest possible dose for the fetus, if any. 7- Providing shielding for radiation-sensitive organs such as the reproductive system, eye lens, breast, and thyroid, as appropriate and whenever possible.

Article 42

Nuclear Medicine Prevention Requirements: Licensees shall observe the requirements for nuclear medicine prevention, in particular ensure that: 1. The medical practitioner prescribing or performing radionuclide diagnostic work verifies that: a. Patients' exposure is at the minimum necessary to achieve the desired diagnostic goal; b. Relevant information from previous examinations is taken into account to avoid unnecessary additional testing; c. Relevant exposure guidelines set by the Committee Medical Radiology.2. The medical practitioner, technologist or other imaging staff shall work to achieve the minimum exposure of patients in accordance with the acceptable quality of the images by: a. Appropriate selection of the best available radiopharmaceuticals and their radioactivity, taking into account the special requirements for children and patients with organ dysfunction. Methods of accelerated excretion from the body of these preparations when needed.c. Optimal collection and processing of images.3- Avoid the use of radionuclides in diagnostic or radiation therapy procedures during pregnancy and in women who are likely to be pregnant, unless there are strong clinical reasons.4- Recommending that breastfeeding mothers stop breastfeeding until the secretion of that amount of radiopharmaceutical that is believed to transmit an unacceptable effective radiation dose to the infant has stopped.
5. Limit the diagnosis of radionuclides to cases of extreme necessity, and take into account the reduction of radioactivity used according to the child's weight, body surface area, or other appropriate criteria.

Article 43

Prevention Requirements in the Field of Therapeutic Exposure: Licensees shall observe the requirements for prevention in cases of therapeutic exposure, and in particular ensure that: 1. Maintain the exposure of healthy tissue during radiation therapy to a reasonable minimum and in a manner consistent with the transfer of the required dose to the planned size of the treatment, and use organ shielding whenever practical and appropriate.2. Avoid radiation therapy procedures that cause exposure to the abdomen or pelvis of a pregnant or likely pregnant woman, if There were no strong clinical causes. 3- Avoid the use of radionuclides for therapeutic procedures for women who are pregnant or likely to be pregnant or breastfeeding, unless there are strong clinical causes.4- Plan any treatment procedure for the pregnant woman so that only the lowest possible dose is delivered to any fetus.5- Inform the patient of the potential risks.

Article 44

The use of non-vertical fluoroscopy devices in specialized clinics is not permitted unless the following conditions are met:1- The device must have the ability to perform regular imaging by films in addition to fluoroscopy, and it must contain the instrument used to take direct situ images during the endoscopy process.2- The necessary means are provided for acidification of films, and the film is not The use of fluoroscopy as a means of saving the costs of films and acidification facilities, as the required information can be obtained at a lower radiation dose through the use of normal imaging methods. 3. Availability of a qualified person to work on the device and provide optimal protection for both patients, other workers and the general public, as well as the protection of the person himself.

Article 45

Clinical dosimetry: Licensees shall measure clinical dosing and ensure that the following items are identified and documented:1. Typical values for entry surface doses, dose position, dose rates, and exposure times for typical size adult patients, or organic doses in the case of radiological examinations.2. Maximum and minimum absorbed doses transferred to the planned volume of treatment, as well as the absorbed dose transferred to a relevant point such as the center of the planned volume of treatment, as well as the dose transferred to other relevant points chosen by the practitioner The medical prescribing treatment, for each patient treated with external radiotherapy equipment.3- Absorbed doses at relevant points are selected at each patient in the case of internal radiation therapy using closed sources.4- Typical absorbed doses received by patients in the case of diagnosis or treatment with open sources

(non-closed) sources.5- Absorbed doses that are delivered to the relevant organs in all types of radiation therapy.

Article 46

Calibration requirements: Licensees shall observe the requirements of titration, in particular verify the following: 1. The possibility of assigning the calibration of sources used in medical exposures to a standard dosimetry laboratory.2. Calibration of radiotherapy equipment with respect to the quality or energy of radiation, absorbed dose or absorbed dose rate at a predetermined distance under certain conditions, following the recommendations of international institutions or bodies, such as the International Atomic Energy Agency.3. Calibration of sealed sources used in endoradiation therapy in terms of radioactivity; Or the reference rate of the kinetic energy of the substance in the air (the dose of karma), or the rate of the absorbed dose in a certain medium and at a certain distance and at a specific reference date.4. Calibration of non-open sources used in nuclear medicine procedures in terms of the activity of the radiopharmaceutical product to be administered, provided that the value of the radioactive activity is determined and recorded at the time of use.5. Calibration shall be carried out at the time of preparing the unit for operation, and after any maintenance that may affect the calibration and the periods determined by the Board.

Article 47

Quality Assurance: Licensees shall develop a comprehensive quality assurance program in the field of medical exposures with the participation of qualified experts in relevant fields such as radiophysics, radiopharmacology, or medical physics, taking into account the principles set out by relevant organizations such as the World Health Organization (WHO) and the Pan American Health Organization (PAHO). Appropriate physical and clinical factors used in the diagnosis or treatment of patients. 3. Written records of the relevant procedures and outcomes.
4. Verify the appropriate calibration and operating conditions of dosimetry and monitoring equipment. 5. Conduct, whenever possible, regular and independent reviews of the quality assurance program for radiotherapy procedures.

Article 48

Records of Prevention of Medical Exposures: The Licensee shall keep and provide records for a period to be determined by the Board, which contain: 1. Information necessary to allow reference to the dosing calendar, including the number of exposures and the duration of endoscopic examinations, in the field of radiology.2. The types of radiopharmaceuticals used and their activities, in the field of nuclear medicine.3. A description of the planned volume of treatment, the dose transferred to the center of the planned volume of treatment, the maximum and minimum doses transferred to the planned volume of treatment, and the doses transferred to other organs with a Relevance, dose-segmentation, and total treatment time in the field of radiotherapy. 4. Exposure of volunteers in the field of medical research.

Article 49

Accidental Medical Exposures:The Licensee shall immediately verify any of the following incidents:1. Any treatment of a patient or one of his or her tissues by mistake, the use of a drug by mistake, or by a dose or portions of the dose that differs materially from the values prescribed by the medical practitioner and may result in excessively severe secondary effects.2. Any diagnostic exposure that significantly exceeds the prescribed exposure, or results in doses that exceed the guidelines levels determined by the Committee frequently and in large quantities.3. Any equipment failure, accident, error, or other unusual event that is likely to result in exposure to patients is very different from the planned exposure.

Article 50

When investigating the accidents referred to in the preceding article, the licensee shall do the following: 1. Calculate or estimate the doses received and distribute them in the patient's body.2. Indicate the corrective measures necessary to prevent the recurrence of such an accident.3. Implement all corrective measures that fall within the scope of its responsibility. 4. Provide the Board with a written report that includes the cause of the accident and the necessary information about the doses and corrective measures taken. 5. Inform the patient and his doctor of the details of the accident.

Article 51

Guidance Levels: The Licensee shall determine, refine and guide medical exposures, such as those adopted in the IAEA Safety Document Series No. 115, in accordance with technological developments, and be guided by medical practitioners, for the following purposes: 1. Take corrective action, as appropriate, if the doses or radiation activities are significantly below the indicative levels, and the exposures do not provide useful diagnostic information and do not achieve the desired medical benefit to patients. 2. Consider an action Reviews if doses or radiation activities exceed the indicative levels, as necessary to achieve optimal patient protection and maintain appropriate levels of good practice.3. For radiodiagnostic tests, including computed tomography (CT scan) and nuclear medicine tests, the indicative levels are derived from data derived from large-scale quality surveys, which include entry surface doses, cross-sectional dimensions of radiation beams emitted by each device, and radiopharmaceutical activities that It is given to patients in connection with the most frequent examinations in the field of radiology and nuclear medicine respectively.

Article 52

Medical examinations: No authority or authority authorized to use nuclear or radioactive techniques for medical purposes may make any diagnosis, treatment or examination for a job or job involving radiation exposure, except when no other technique or means of examination is available, or would result in positive results of real benefit to the person treated by such a method, provided that the radiation dose is reasonably low within economic possibilities When conducting the examination for women, the examiner must first verify the existence of pregnancy or not, and in the event that the pregnancy is proven, whatever its stage, he shall not perform radiological examinations, unless there is an urgent necessity determined by the treating specialist and there are no other alternative methods, and if the person is subject to periodic radiographic examination without clinical referral, the licensee shall make an assessment from time to time of the information resulting from the examinations performed on him To rely on them to determine the method of treatment, to modify it, or to discontinue the examination for the benefit of that person. When conducting any mass survey for any reason, licensees should take into account the outweighing of the benefits of the survey over its harms. Such a survey may be conducted only with the approval of the Secretary-General, on the recommendation of the Committee and in accordance with the conditions and restrictions it establishes, including limiting the survey to a specific group of people.

Chapter Three

General Public Exposure

Article 53

General Responsibilities: The Licensee shall have all responsibilities related to the exposure of the general public and future generations and the pollution of the environment as a result of their use of radioactive sources.1- Develop policies, methods and regulatory arrangements that achieve the implementation of the requirements and rules for the exposure of the general public.2- Develop precautions, contingency plans and radiation monitoring arrangements that are commensurate with the nature and magnitude of the radiation hazards at the time of the accident.3- Provide adequate and appropriate manpower and train personnel appropriately.4- Maintain adequate records specified in the Regulations approved by the Council.5. Provide sufficient information and instructions to visitors to ensure that their exposure is restricted and that of other individuals who may be affected by the presence of such visitors.

Article 54

Dosage limits for the general public: The dose for the general public is determined by a decision of the committee.

Article 55

Patient Visitors: Dosage limits for the general public do not apply to persons accompanying or visiting patients, and the dose received by any of these persons is restricted by the limits set by the Committee.

Article 56

Requirements for regulating the protection of the public: The licensee shall comply with the following:
1. Establish procedures and regulatory arrangements for the protection and safety of the general public.2. Take measures to ensure optimal protection and limit the normal exposure of the critical group.3. Take the necessary measures to achieve the safety of the sources so that the

possibility of exposure to the public can be monitored, and to ensure the safety of appropriate and adequate facilities, equipment, and services to protect the general public so that their nature and extent are commensurate with the amount and tolerance of the exposure.4. Provide appropriate monitoring equipment and surveillance programs 5. Provide appropriate training for personnel performing functions related to the protection of the public.6. Maintain adequate records of surveillance and monitoring.7. Develop contingency plans and procedures.

Article 57

Discharge of Radioactive Materials: Radioactive
materials resulting from licensed radioactive practices and sources may not be released into the environment unless the release is within the limits approved by the Council, using the methods described in the Radioactive Waste Management Instructions, and in accordance with the conditions and limits set by the Committee.

Article 58

Environmental Monitoring: Licensees are responsible for carrying out environmental radiation monitoring during the operating phases of radioactive sources under their responsibility, taking into account the following: 1. Keeping all radioactive releases to a minimum.2. Monitoring the releases with the necessary detail and accuracy to demonstrate compliance with the approved limits and to allow for an assessment of the exposure of the critical group.3. Recording the results of monitoring and estimated exposures.4. Reporting to the Board as specified in the License.5. Immediately informing the Board of any release that exceeds the approved limits.

Article 59

Consumer Products: The import of consumer products that may cause exposure to the general public may not be allowed except in the following two cases: 1. Exemption of such exposure by the Committee.2. The Council authorizes the use of these products by the general public.Entities that import consumer products that may cause exposure to the general public, for the purpose of selling and distributing them later, must attach to the license application

submitted to the Council a copy of the license issued by the competent authorities in the country of origin that authorizes the distribution of these products to the general public country.

Article 60

Visitors to the control areas and supervision areas: Visitors to the control areas should be accompanied by someone who is familiar with the prevention and safety measures, and that visitors should be provided with adequate information and instructions before entering any control area, to ensure that appropriate protection is provided to them and other individuals who may be affected by their actions.

Chapter Four

Requirements for the safety of radioactive sources

Chapter One

General Management and Security Performance Requirements

Article 61

Characteristics and Guidelines of Prevention and Safety: The Licensee must develop an administrative system that is commensurate with the size and nature of the Licensed Practice, and this system must include a set of characteristics and guidelines related to prevention and safety, which include the following: 1- Following clear steps to make decisions related to prevention and safety.2- Quickly identifying and treating problems that affect prevention and safety in a manner consistent with their importance.3- Clearly defining the responsibilities of each individual regarding prevention and safety, and training and qualifying them appropriately.4- Developing organizational arrangements. Sufficient for the ease and speed of the communication mechanism and the mechanism of transmitting information related to prevention and security at all levels in the entity to which the licensee belongs.

Article 62

Quality Assurance: The Licensee shall develop and implement a quality assurance program, which shall include the following: 1. Adequate assurance of compliance with specific requirements related to prevention and safety.2. Adequate assurance of the training and qualification of all workers on whom protection and safety depend are adequately trained to understand and perform their duties.3. Provide quality assurance mechanisms and procedures for reviewing and evaluating the activities of radiation protection and safety systems.

Article 63

Consideration of human factors: The licensee shall follow appropriate principles that take into account the capabilities of the operators in the design of the equipment and the application of operating procedures, and shall work to provide adequate equipment, safety systems and procedures that would reduce the possibility of human errors as much as possible, and provide the necessary means to detect them and facilitate the mechanism of intervention in the event of emergency accidents.

Article 64

Source Security: Sources are kept securely for the purpose of preventing unauthorized use or transfer, theft or damage, by verifying the following: 1- Ensuring the continuity of supervision of the sources without prejudice to all relevant requirements as specified in the license, and the Board must immediately be informed of the information related to the cessation of censorship of any source, loss, theft, loss or loss of control over any source. 2- Not to transfer any source to any entity before confirming that the entity has obtained 3. Conduct a periodic inventory of the resources at intervals as specified in the license to ensure their presence in the designated places and to secure them.

Article 65

Necessary Precautions: The Licensee undertakes to implement a precautionary system on prevention and safety, commensurate with the magnitude and likelihood of possible or potential exposures, to achieve the following: 1. Prevent accidents that may cause exposure, 2. Mitigate

the consequences of any such accident if they occur, and 3. Restore the sources to safe conditions after the accident.

Article 66

Engineering Standards: The locations of the sources within the scope of the practices must be selected, designed, constructed, assembled, prepared for operation, operated, maintained and decommissioned permanently, in accordance with engineering standards that meet the following specifications:1- Appropriate engineering and technical instructions, standards and other documents must be observed and supported by reliable administrative and organizational systems that ensure the implementation of prevention and safety requirements throughout the life of the resources.2- They must include sufficient safety margins when designing and constructing the resources and the practices in which they are involved in in a way that ensures the achievement of Reliable performance during normal operating conditions, taking into account quality and inspectionability, and emphasizing the prevention of accidents, mitigating their consequences, and limiting any future radiation exposures. 3. Taking into account scientific and technical developments and the results of relevant research in the field of prevention and safety.

Article 67

Regulation of Protection in the Facility:
The Licensee shall take all necessary measures to regulate the prevention of accidents, following the following:1- Monitoring the means actually used for the purpose of protecting against radiation exposure.2- Providing the necessary means to monitor the perimeter of the facility and warning signs to ensure that the dosage limits are observed.3- Keeping and keeping the records stipulated in this Regulation and the decisions issued thereunder.4- Determining the boundaries of the control areas and supervision areas.5- Preparing and implementing the following local work instructions and ensuring their effectiveness: A. Protection and control instructions required to be observed for the normal conduct of the activities and works of the facility.b. Instructions related to the implementation of maintenance, repair or testing works.c. Instructions for intervention in the event of an accident.d. Instructions for monitoring individual radiation doses.e. Instructions for periodic inspection to ensure the validity and calibration of all used radiation measurement and scanning devices.6. Appointing a radiation protection officer, defining his tasks, duties and powers and circulating this to all employees.

Article 68

Records of Sources and Operations: The licensee shall prepare a record that is constantly updated, in which the following shall be indicated: 1- Data of all radioactive sources, their movement, and any accidents to which they have been exposed.2- Collecting the modifications and changes made to the radioactive sources and the means of prevention, the nature of these modifications, the names of the persons who carried them out, the date of their implementation, and the accidents that occurred during them.3- Inspections and control of radioactive sources, the date of their implementation, and the observations recorded during the period.4- Periodic inventory of radioactive sources and their movement and ensuring the presence of such sources in their places Safe.

Article 69

Notification of users of radioactive sources: The licensee shall inform the users of radioactive sources of the following: 1. The risks of exposure to radiation, 2. The precautions to be taken to prevent such hazards, 3. The methods of action that provide the best levels of protection and safety, 4. The guarantees provided by physical measures and periodic medical examinations, and 5. The instructions for safety and radiation prevention, and the obligation to comply with them.

Article 70

Efficiency and Qualification of Users: The handling and use of radioactive sources shall be under the constant supervision of qualified and licensed users by the Board.

Chapter Two

Safety of Radioactive Sources and Accidents

Article 71

Design Requirements: The Licensee is obligated to put in place procedures to ensure the safety of the sources under its responsibility with a view to limiting the possibility of potential exposures.

Article 72

Source Location:
When choosing a location for any source, the following should be considered: 1- Factors that may affect the security of the sources.2- Factors that may affect the exposure of employees and the general public internally or externally.3- The engineering design should take into account all other factors.

Article 73

Facility Location: An evaluation should be made for any proposed site for the construction of a facility that uses radioactive sources, taking into account the characteristics of the site that may affect the safety of sources, such as floods, floods, earthquakes, and other natural disasters, and the extent to which the proposed site is able to cope with these factors.

Article 74

Maintenance, Testing and Control: The Licensee is obliged to perform the following:1- Perform maintenance, monitoring, testing and all types of service, whenever necessary, to ensure that the source remains in good condition, meeting the protection and safety requirements of the design throughout the life of the export.2- Implementing programs and works for maintenance, monitoring and testing, in accordance with the methods codified and supported by the requirements of quality control.

Article 75

Incident Management: The Licensee must be prepared to take any necessary actions or actions to face and deal with any emergency incidents and correct operational errors. For large and complex sources, the licensee shall: 1. Prepare in advance an accident management manual that meets the effective response to the safety requirements of the source in potential accidents.2. Provide and equip the equipment, tools and diagnostic means that may be necessary to control the course of the accident and its resulting and potential effects.3. Provide adequate training for operational and emergency personnel on the roads and steps to be followed when the accident occurs.

Article 76

Contingency Plans: The
Licensee shall prepare contingency plans approved by the Council, for any practice that may require immediate intervention from the Council. The Licensee shall be fully responsible for the implementation of the plan on and off site, while outside the area contingency plans shall be implemented by the parties concerned with the intervention, whether the Civil Defense or the Council. The contingency plan includes the following: 1- Identifying responsibilities for notifying the relevant authorities and initiating the intervention.2- Identifying the different operational conditions of the source that may lead to the need for intervention.3- Assessing the levels of intervention and the scope of application of different protective measures depending on the duration of the incident.4- Methods and steps to contact the concerned authorities for their assistance. 5. Describe the methods and identify the necessary tools for the evaluation of the incident inside and outside the site and the sequence of these methods.6. Describe the communication and information arrangements.7. Criteria for ending the intervention.Contingency plans shall be reviewed and updated periodically and according to the rate determined by the Council, and all precautions shall be taken to train all individuals contributing to the implementation of these plans. The Licensee shall provide the appropriate needs and capabilities to provide information to the various authorities capable of predicting the size and extent of radiation releases, for the purpose of rapid and continuous assessment of the situation and the extent of the need for preventive work.

Article 77

Prevention of intervention personnel: No worker carrying out an intervention may be exposed to a dose exceeding the maximum dose prescribed in one year for occupational exposure as determined by the Committee, except in the following cases: 1. To save lives or prevent serious injury, 2. To take measures aimed at avoiding a large cumulative dose, 3. To take measures to prevent the development of catastrophic circumstances. Dose limit in one year, with the exception of life-saving measures, where every effort is made to keep the doses less than ten times the maximum dose in one year, in order to avoid certain effects on health. Workers should not take actions in which the dose they receive may approach or exceed ten times the maximum dose in a single year, except in cases where the benefits to others are clearly greater than the risk to the worker. In order to provide appropriate prevention during the emergency intervention, and to evaluate and record the doses received by the personnel conducting the emergency exposure, the participating personnel are informed of the doses received and the resulting health risks, and in cases where it is not excluded that the workers will receive normal occupational exposure in addition to the emergency exposure, medical advice from a qualified physician is required before receiving such additional exposure if the worker who participated in an emergency exposure has received a dose that exceeds ten times Maximum dosage in one year, or at worker's request.

Chapter Three

Instructions for the Safe Transportation of Radioactive Materials

Article 78

Transportation of Radioactive Materials: No radioactive material may be transported by any means of transportation within the country or across its borders, except in accordance with the provisions of this Regulation, the Instructions for the Safe Transport of Radioactive Materials, and the Rules for the Safe International Transport of Radioactive Materials if the Transport is International.

Article 79

Transportation Instructions: A decision shall be issued by the Chairman of the Council on the Safe Transportation of Radioactive Materials, which includes the following: 1- The technical terms necessary to implement the provisions for the safe transport of radioactive materials.2- Standards for the classification, packaging and transportation of radioactive materials by all

means of land, sea or air transportation within or across the borders of the country.3- The scope of the validity of the instructions, the types of packages covered by them, and the radioactive materials covered by the instructions and those not covered by them.4- The description of radioactive materials and the exemptions covered by them.5- The provisions of the packaging of radioactive materials and the permissible limits.6- Specification provisions. Consignments or any cargo of radioactive materials shall be a place of transport. 7. Instructions for the shipment of radioactive materials, its procedures and conditions.

Chapter Five

Radioactive Waste Management

Chapter One

General Provisions for Radioactive Waste Management

Article 80

Scope of application: The provisions of this section shall apply to all practices and works related to the management of radioactive wastes, including all processes of collection, separation, characterization, classification, configuration, processing, processing, storage and disposal of radioactive waste generated by all radioactive practices in the medical, industrial, agricultural, pharmaceutical, research, educational, and other fields. Waste from the nuclear fuel cycle is subject to additional provisions and requirements, by a decision of the President.

Article 81

Exemptions and Exemptions: Radioactive waste shall be exempt from the provisions of this Regulation if its content is radionuclide below the permissible levels determined by the Committee.

Article 82

Responsibilities: The Licensee is responsible for the safe management of radioactive waste, and must take all necessary steps to ensure the safety of such wastes, comply with all instructions for the safe management of radioactive waste, as well as comply with all appropriate instructions, including radiation protection and safety instructions. The Licensee's responsibilities include: 1. Conducting safety and environmental impact assessments.2. Ensuring adequate protection for employees, the general public (the public) and the environment.3. Ensuring the provision of trained personnel, appropriate equipment, facilities, training, and operating steps to ensure the safe implementation of radioactive waste management steps.4. Establishing and implementing a program to ensure the quality assurance of the radioactive waste generated, treated, stored and disposed of.5. Establish and maintain records of appropriate information on the generation, treatment, storage and disposal of radioactive waste, including the storage of radioactive waste. Waste.6. Providing monitoring and supervision of the radioactive waste generated and its storage places.

Article 83

License:
No natural or legal person may manage radioactive waste without a license from the Council.The applicant for a license must submit to the Council an application for a license to manage radioactive waste thirty days before commencing work, and the application shall include all the details related to this department in accordance with the requirements of this Regulation, and the conditions and procedures issued by the Committee.

Article 84

Appointment of Radioactive Waste Management Officer: The Licensee shall appoint a technically qualified and independent person to act as a Radioactive Waste Management Officer, who shall be licensed to do so by the Board, and the Radiation Protection Officer may perform this function in such cases as the Board deems appropriate.

Chapter Two

Control and Inspection

Article 85

Inspection:
All practices directly or indirectly associated with radioactive waste, and all places where such practices are taking place, or which could affect or are affected by, are subject to inspection by the Board. The Board shall also have the right to inspect all persons engaged in practices related to the management of radioactive waste, and to obtain copies of all records of radioactive materials or waste.

Article 86

Radioactive waste generation control: The licensee must ensure that the generation of radioactive waste is at a feasible minimum.

Article 87

Classification of radioactive wastes: Radioactive wastes once generated are classified as follows: 1. Permissible (exempt) substances or wastes: Substances containing levels of radioisotopes at concentrations lower than those determined by the Committee.2. Low-level (short-lived) wastes or decay wastes: Low-level radioactive wastes, containing only short-half-life radioisotopes, i.e., radioisotopes with a half-life of less than one hundred days, and which decay to permissible levels within three years of Date of Birth.3- Low, Medium-Level and Short-Life Wastes: Wastes that do not decay up to permissible levels within three years, and contain radioisotopes emitting beta particles and gamma radiation with a half-life of less than thirty years, or emitting alpha particles with a radioactivity of less than 400 Bacrel/g, and their total radioactivity does not exceed 4000 Bacrel per package of these wastes. 4- Low and medium-level wastes with a long half-life: Radioactive wastes containing radioisotopes in concentrations higher than those of those for short-lived, low- and medium-level wastes, which do not generate heat at a rate of more than three kW/m³ of waste.5. High-level wastes: Radioactive wastes containing radioisotopes in concentrations greater than those of low- and medium-level radioactive wastes, short-lived and generate heat at a rate of more than three kW/m3 of waste.

Article 88

Recycling and Reuse of Radioactive Materials: The licensee to use radioactive materials shall observe the following: 1. Not to open or dismantle any sealed source.
2. Such materials shall not be considered as radioactive waste, if they can be reused by him or any other party. 3. He shall not transfer the radioactive materials to another beneficiary without the approval of the Board, and after confirming that such entity is licensed by the Board.

Article 89

Return of Sealed Sources to the Supplier: When purchasing sealed sources, the Licensee shall include in the contract a provision for the return of the radioactive source to the supplier after the end of its need if its radioactive activity exceeds the limits set by the Committee, within a period not exceeding fifteen years from the date of purchase. In writing prior to the date of the contract or importation of the exporter.

Article 90

Discharge of radioactive materials to the environment: The licensee shall ensure that radionuclides are not released into the environment, except in accordance with the following controls: 1. The discharge limits shall be within the limits authorized by the license granted to him by the Council, and shall be within the conditions determined by the Committee.2. The radioactive activity of the liquid and gaseous wastes discharged shall be within the limits set by the Committee. The Licensee shall also observe the following:1. Maintain the discharge and release of radionuclides at the minimum feasible limit within the economic and technical limits, below the authorized limits.2. Monitor and record the discharge and release of radionuclides in sufficient detail and accuracy to demonstrate compliance with the authorized discharge limits and the permissible exposure to human populations.
3. Submit a discharge report to the Board, within the time periods determined by the Board.4. Immediately report to the Board on any discharge or release exceeding the authorized limits.

Article 91

Radioactive Waste Disposal: Where radioactive waste is unsuitable for discharge or release into the environment or to be allowed within a reasonable period of time, everyone in possession of such waste must submit an application to the Board for disposal, ensuring that the criteria established by the Council and the Committee for the acceptance of radioactive waste in any cemetery or at any national waste management authority are met.

Article 92

Separation, collection and characterization of radioactive wastes: The licensee shall ensure that the radioactive waste is segregated in groups at the place of origin, as determined by the Committee, and the waste is segregated in groups on the basis of categories, which help to use the available treatment options.

Article 93

Storage of waste: The storage of radioactive waste is prohibited except in a manner that achieves the protection of human health and the environment, and in particular, such waste must not be stored near corrosive, explosive or flammable materials. 2- A simple structure consisting of non-combustible walls and floors that are easy to decontaminate.3- Non-permeable floor cover with containment edges and slight inclinations for a central liquid collection area.4- Adequate ventilation.
5. Ability to collect air samples and radiation alarm.6. Availability of means of fire detection and prevention.7. Provision of breakers for separating different types of radioactive wastes, to facilitate the safe storage of materials with special hazards, volatile and pathogenic, and perishable and chemically active materials.8. The performance record should be kept outside the storage area, near the storage place or space.10. Provide protection for waste from the surrounding environment including temperatures.11- Provide protection against intrusion.12- Use of radiation-protective mobile shields as needed.

Article 94

Quality Assurance:
The Licensee must submit a Quality Assurance Program to the Board for approval, as part of the license application, covering all aspects of radioactive waste management, facilities, activities and wastes, and that this program is proportional to the size of the operations. 2- Site plans, engineering drawings, specifications and descriptions of operations.3- Data resulting from quality assurance, quality control steps, and operating activities.4- Methods of environmental and safety assessment and methods of calculation.5- Results of environmental assessment and safety assessment.6- Results of environmental impact monitoring, disbursement and broadcast rates.7- Identification of radioactive waste parcel identification numbers.8- Data on disposed of waste and its place of discharge.

Article 95

Physical Prevention: The Licensee shall ensure that all means are taken to prevent unauthorized persons from entering areas for storage, collection, treatment or storage of radioactive waste.

Article 96

Records and Reports: The Licensee shall submit to the Board a report and record of its actual stock of radioactive waste, including the details requested by the Board.It shall also shall, within fifteen days from the end of each year, send to the Board a copy of the Waste Stock Record and a report for the year specifying the types, quantities and final conditions of the following: 1- Materials permitted to be released into the environment.2- Waste discharged into the environment.3- Closed sources returned to the supplier.4- Any other details requested by the Board.The Board has the right to inspect and review. If radioactive materials are released into the environment at rates exceeding permissible levels, or when waste is discharged at rates exceeding the limits set by the Committee, the Licensee shall immediately inform the Board and submit a written report thereof and the actions taken within twenty-four hours to be presented to the Committee.

Article 97

Radioactive Waste Contingency Plan: The Licensee shall provide a plan for the radiological contingency that may result from such wastes, provide the human, technical and material competencies necessary to face the emergency situation, and submit this plan to the Board for approval, and shall train the personnel or crews of the confrontation on all confrontation work, including work related to the removal of radioactive contamination, and the restoration of control of radioactive waste. Wastes that require the participation of individuals or entities other than the Licensee should be coordinated in advance, the role of each of them should be determined, and the necessary training should be conducted for them.

Article 98

Non-ionizing radiation: The President shall issue instructions for the prevention of non-ionizing radiation, upon the recommendation of the Committee, within a period not exceeding two years from the date of entry into force of this Regulation.

Article 99

Matters where no provision is provided: In the absence of a provision in these Regulations, the standards issued by international agencies and organizations, such as the International Atomic Energy Agency and the World Health Organization, shall apply.
