

No. 4 of 2019.

***Radiation Safety and Control Act 2019.***

Certified on : 4/09/2019



No.            of 2019.

***Radiation Safety and Control Act 2019.***

**ARRANGEMENT OF SECTIONS.**

**PART I. - PRELIMINARY.**

1. Compliance with constitutional requirements.
2. Interpretation -
  - “activities”
  - “authorised officer”
  - “authorised person”
  - “clearance”
  - “clearance levels”
  - “controlled good”
  - “decommissioning”
  - “Director-General”
  - “disposal”
  - “exclusion”
  - “exemption”
  - “exemption level”
  - “exposure”
  - “facilities”
  - “IAEA”
  - “in transit”
  - “inspection”
  - “ionising radiation”
  - “licence”
  - “NISIT Act”
  - “notification”
  - “nuclear material”
  - “nuclear radiological emergency”
  - “orphan source”
  - “Panel”
  - “practice”
  - “premises”
  - “purchaser”
  - “radiation generator”
  - “radiation source”
  - “radioactive material”
  - “radioactive source”
  - “radioactive waste”

“radioactive waste management”  
“Regulatory Body”  
“regulatory control”  
“Safeguards Agreement”  
“safety”  
“security”  
“sell”  
“seller”  
“the Institute”  
“this Act”  
“transport”

3. Application.
4. Act binds the State.

## **PART II. - DESIGNATION, FUNCTIONS, POWERS, ETC., OF THE REGULATORY BODY.**

5. Designation of the regulatory body.
6. Functions of the Institute.
7. Powers of the Institute.
8. Committees of the Institute.
9. Delegation by the Institute.

## **PART III. - RADIATION CONTROL ADVISORY PANEL.**

10. Establishment of the Radiation Control Advisory Panel.
11. Membership of the Panel.
12. Leave of absence.
13. Vacation of office.
14. Vacancy not to affect powers and functions.
15. Decisions of the Panel.
16. Remunerations of the Panel.
17. Calling of meetings.
18. Meetings of the Panel.
19. Disclosure of interest by member.

## **PART IV. - ADMINISTRATION OF THE REGULATORY BODY.**

20. Functions of the Director-General.
21. Delegation by the Director-General.
22. Staff.
23. Public Service rights.
24. Annual reports.
25. Finances.

## **PART V. - LICENCES.**

26. Notification.
27. Licence generally.
28. Application for licence.

29. Scope of the licence.
30. Grant of licence.
31. Refusal of licence.
32. Exemption from licence.
33. Conditions for licence.
34. Variation of licence.
35. Term of licence.
36. Cancellation of licence.
37. Sales and purchases.
38. Registers.

#### **PART VI. - LICENCE FOR TRANSPORTATION OF RADIOACTIVE MATERIALS.**

39. Licence for transporting radioactive material.
40. Safety and security of radioactive material.
41. Requirements for transportation of radioactive material.

#### **PART VII. - LICENCE FOR RADIOACTIVE WASTE MANAGEMENT.**

42. Licence for radioactive waste management.
43. General principles on radioactive waste management.
44. Requirements for managing radioactive waste.
45. Import of radioactive waste.
46. Export of radioactive waste.

#### **PART VIII. - LICENCE FOR EXPORT AND IMPORT CONTROL.**

47. Without prejudice.
48. Licence for exports and imports.

#### **PART IX. - RADIATION PROTECTION.**

49. Fundamental principles of radiation protection.
50. Medical practices.
51. Protection of patients.
52. Occupational exposure.
53. Public exposure.

#### **PART X. - INSPECTION AND ENFORCEMENT.**

##### ***Division 1. - Inspection.***

54. Conducting inspections.
55. Power of entry and inspection.
56. Notice for inspection.
57. No obstruction.

##### ***Division 2. - Enforcement.***

58. Powers in the case of breach.

59. Power to give directions.

**PART XI. - RADIOACTIVE SOURCES.**

60. Categorisation of radioactive sources.  
61. Recovery of orphan sources.

**PART XII. - EMERGENCY PREPAREDNESS AND RESPONSE.**

62. Emergency plans.  
63. National emergency plan.  
64. Powers during nuclear or radiological emergency.

**PART XIII. - NUCLEAR SAFEGUARDS AND PHYSICAL PROTECTION.**

*Division 1. - Nuclear Security.*

65. General responsibilities for physical protection.

*Division 2. - Safeguards.*

66. Interpretation of this division.  
67. Responsibility of Institute in relation to safeguards.  
68. General principles on safeguards.  
69. Co-operation in application of safeguards.  
70. Responsibility of authorised persons.

**PART XIV. - APPEALS.**

71. Appeals panel.

**PART XV. - OFFENCES AND PENALTIES.**

*Division 1. - Administrative Offences.*

72. Administrative offences.  
73. Administrative penalties.

*Division 2. - Criminal Offences.*

74. Theft, embezzlement and related offences.  
75. Handling of radioactive or nuclear materials and devices.  
76. Offences relating to nuclear facilities.  
77. Communication prejudicing security of nuclear material or an associated item.  
78. Threat or use of force.  
79. Dealing with criminal offences.  
80. Offences by corporations.  
81. Criminal offences.

**PART XVI. - MISCELLANEOUS.**

- 82. Retrospectivity.
- 83. No disclosure of information.
- 84. Availability of records.
- 85. Regulations.

**PART XVII. - TRANSITIONAL PROVISIONS.**

- 86. Transitional provisions.
- 87. Savings.

**SCHEDULE.**



No.            of 2019.

AN ACT

entitled

***Radiation Safety and Control Act 2019,***

Being an Act -

- (a) to provide for the safe, secure and peaceful use of nuclear energy and ionising radiation; and
  - (b) to regulate and control activities, practices and facilities, with the aim of protecting individuals, society and the environment from the harmful effects of nuclear energy and ionising radiation; and
  - (c) to give effect to the *Safeguards Agreement* and the **Treaty on Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty)** entered into force on 13 October 1983, in ensuring the peaceful use of nuclear energy,
- and for related purposes,

MADE by the National Parliament to come into operation in accordance with a notice published in the National Gazette by the Head of State, acting with, and in accordance with, the advice of the Minister.

**PART I. - PRELIMINARY.**

**1. COMPLIANCE WITH CONSTITUTIONAL REQUIREMENTS.**

This Act, to the extent that it regulates or restricts a right or freedom conferred to in Subdivision III.3.C (*qualified rights*) of the *Constitution*, namely -

- (a) freedom from arbitrary search and entry conferred by Section 44; and
- (b) right to privacy conferred by Section 49; and
- (c) right to freedom of information conferred by Section 51; and
- (d) protection from unjust deprivation of property conferred by Section 53,

is a law that is made pursuant to Section 38 of the *Constitution* that is necessary for the purpose of giving effect to the public interest in, defence, public safety, public welfare and public health and is reasonably justifiable in a democratic society having a proper respect and regard for the rights and dignity of mankind, taking into account the National Goals and Directive Principles and Basic Social Obligations, because of the risk that nuclear energy and ionising radiation poses to human health, the community and the environment, if not adequately regulated and to provide for its safe, secure and peaceful uses.

## *Radiation Safety and Control*

### 2. INTERPRETATION.

For the purposes of this Act -

“activities” means -

- (a) the production, possession, use, storage, import and export of radiation sources and nuclear material for industrial, research and medical purposes; and
- (b) the transport of radioactive material; and
- (c) the siting, construction, commissioning, operation and decommissioning of facilities; and
- (d) radioactive waste management activities, including disposal; and
- (e) site rehabilitation;

“authorised officer” means a person who is appointed, in writing, by the Director-General of the Institute to perform certain duties under this Act, relating but not limited to, licencing, inspection and enforcement;

“authorised person” means a person who is the holder of a valid licence issued under this Act;

“clearance” means the removal of radiation sources within authorised practices from any further control by the Institute;

“clearance levels” means values, established by the Institute, below the value which radiation sources may be released from regulatory control;

“controlled good” means a radiation source, nuclear and other radioactive material and other radiation equipment or technologies which requires licencing for its importation or exportation;

“decommissioning” means -

- (a) all steps leading to the release of a facility, other than a disposal facility, from regulatory control other than confirming the decommissioned status of a facility; and
- (b) the processes of decontamination and dismantling;

“Director-General” means the Director-General appointed under Section 20 of the *National Institute of Standards and Industrial Technology Act 1993*;

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

“exclusion” means the deliberate exclusion of a particular category of exposure from the scope of this Act on the grounds that it is not considered amenable to regulatory control;

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

“exemption level” means a value, established by the Institute and expressed in terms of activity concentration, total activity, dose rate or radiation energy, at or below which a source of radiation need not be subject to some or all aspects of regulatory control;

“exposure” means -

- (a) the state or condition of being subject to irradiation; and



## *Radiation Safety and Control*

- (b) external exposure which is exposure to radiation from a source outside the body and internal exposure which is exposure to radiation from a source within the body;
- “facilities” means nuclear facilities, radioactive waste management facilities and any other places where radioactive material is produced, processed, used, handled, stored or disposed of, on such a scale that consideration of protection and safety is required;
- “IAEA” means the International Atomic Energy Agency;
- “in transit” includes any occasion on which any specified radioactive substance or apparatus remains on board an aircraft, ship or other form of transportation;
- “inspection” includes an examination, conduct of tests, calibration, assessment and search of premises, documents and sources, and other methods to verify compliance with this Act;
- “ionising radiation” means for the purpose of radiation protection, radiation capable of producing ion pairs in biological material;
- “licence” means the granting, by the Institute of a written permission for a person to conduct activities or practices and may include a licence issued under this Act for matters relating to activities, practices or facilities;
- “NISIT Act” means the *National Institute of Standards and Industrial Technology Act 1993*;
- “notification” means a notice submitted to the Institute by a person or body intending to conduct practices or activities;
- “nuclear material”, for the purpose of the application of IAEA safeguards means -
- (a) any source material including uranium containing the mixture of isotopes occurring in nature, uranium depleted in the isotope 235, thorium and any of the foregoing in the form of metal, alloy, chemical compound or concentrate; or
  - (b) any fissionable material including plutonium-239, uranium-233, uranium enriched in the isotopes 235 or 233, and any material containing one or more of the foregoing;
- “nuclear radiological emergency” means an emergency in which there is, or is perceived to be a hazard due to -
- (a) the energy resulting from a nuclear chain reaction or from the decay of products of a chain reaction; or
  - (b) radiation exposure;
- “orphan source” means a radioactive source which is not under regulatory control, either because it has never been under regulatory control or because it has been abandoned, lost, misplaced, stolen or transferred without proper licensing;
- “Panel” means the Radiation Control Advisory Panel established under Section 10;
- “practice” means any human activity that introduces additional sources of exposure or exposure pathways or extends exposure to additional people or modifies the network of exposure pathways from existing sources in a way that increases the exposure or the likelihood of exposure of people or the number of people exposed;
- “premises” means any place, property or facility where activities and practices are conducted;
- “purchaser” includes any person, other than a carrying agent, acting on behalf of a purchaser;

## *Radiation Safety and Control*

- “radiation generator” means any apparatus capable of producing ionising radiation of any prescribed type, or capable of accelerating atomic particles under any prescribed conditions;
- “radiation source” means a radiation generator, or radioactive source or other radioactive material outside the nuclear fuel cycle of research and power reactors;
- “radioactive material” means material that is subject to regulatory control because of its radioactivity;
- “radioactive source” means -
- (a) radioactive material that is permanently sealed in a capsule or closely bonded in a solid form and that is not exempted from regulatory control; and
  - (b) any radioactive material released if the radioactive source is leaking or broken, but does not include material encapsulated for disposal, or nuclear material within the nuclear fuel cycles of research and power reactors;
- “radioactive waste” means any material, whatever its physical form, that contains or is contaminated with radioactive material, for which no further use is foreseen;
- “radioactive waste management” means all administrative and operational activities involved in the handling, pretreatment, treatment, conditioning, transport, storage and disposal of radioactive waste;
- “Regulatory Body” means the National Institute of Standards and Industrial Technology;
- “regulatory control” means any form of control or regulation applied to facilities and activities by the Institute for reasons relating to nuclear safety and radiation protection or to nuclear security;
- “Safeguards Agreement” means the Agreement between the Government of Papua New Guinea and the IAEA for the application of safeguards in connection with the **Treaty on Non-Proliferation of Nuclear Weapons** which entered into force on 13 October 1983, and any protocols or amendments to this Agreement;
- “safety” means the protection of people and the environment against risks and the harmful effects of radiation and the safety of activities, practices and facilities that give rise to radiation risks or harm;
- “security” means the prevention and detection of and response to theft, sabotage, unauthorised access, illegal transfer or other malicious acts involving radiation sources or nuclear material or their associated facilities;
- “sell” includes -
- (a) placing on the market for sale; or
  - (b) bargaining, barter, exchange, loaning or giving; or
  - (c) supply and use under a contract for work and materials; or
  - (d) dealing in or agreeing, causing, permitting or attempting to sell or allowing to be sold; or
  - (e) offering, exposing, receiving, supplying or possessing for the purposes of sale; or
  - (f) sending or delivering for sale or on sale with or without consideration; or
  - (g) supply or disposal under hire purchase, credit sale or otherwise upon terms; or
  - (h) wholesale, bulk and retail trading and the concepts of sale and purchase;
- “seller” includes any person acting or representing himself to be acting for a seller;

## *Radiation Safety and Control*

“the Institute” means the National Institute of Standards and Industrial Technology established under the *National Institute of Standards and Industrial Technology Act 1993*;

“this Act” includes the regulations and subordinate enactments made under it;

“transport” means -

- (a) all operations and conditions associated with and involved in the movement of nuclear or other radioactive material; and
- (b) the design, manufacture, maintenance and repair of packaging and the preparation, consigning, loading, carriage, including in transit storage, loading and receipt at the final destination of loads of the material and packages.

### **3. APPLICATION.**

This Act shall apply to all activities, practices and facilities, except exposures that have been excluded from regulatory control by the Institute.

### **4. ACT BINDS THE STATE.**

This Act binds the State.

## **PART II. - DESIGNATION, FUNCTIONS, POWERS, ETC., OF THE REGULATORY BODY.**

### **5. DESIGNATION OF THE REGULATORY BODY.**

The Institute established under the *National Institute of Standards and Industrial Technology Act 1993*, is designated as the regulatory body for the regulation and control of activities and practices under this Act.

### **6. FUNCTIONS OF THE INSTITUTE.**

In addition to Section 5 of the *National Institute of Standards and Industrial Technology Act 1993*, the functions of the Institute are -

- (a) to exercise the licensing functions; and
- (b) to oversee the establishment of facilities and activities; and
- (c) to set limits for exclusions, exemptions and clearance levels; and
- (d) to establish dose limits for the purposes of radiation protection; and
- (e) to issue directives to persons or agencies who operate activities and facilities to correct unsafe conditions; and
- (f) to oversee response to nuclear or radiological emergencies, establish and monitor emergency plans; and
- (g) to establish requirements for liability insurance; and
- (h) to establish and enforce rules, standards, guidelines or codes of practice under this Act; and
- (i) to conduct research on matters pertaining to this Act; and
- (j) to keep accurate records of authorised persons, radiation sources, activities, practices and facilities being operated; and
- (k) to establish and maintain a national system of accounting to control nuclear material; and

## *Radiation Safety and Control*

- (l) to provide advice to the Minister in the formulation of government policy for the regulation and control of activities, practices and facilities under this Act; and
- (m) to co-operate with the IAEA in the application of safeguards; and
- (n) to make available general information regarding activities, facilities, practices and any other matters under this Act; and
- (o) to report to the Minister from time to time or as directed by the Minister; and
- (p) to perform such other actions as are set out in this Act or any other law and any other functions incidental to the functions stated in this section.

### **7. POWERS OF THE INSTITUTE.**

The Institute has, in addition to the powers otherwise conferred on it by this Act and any other laws, full powers to do all things that are necessary or convenient to be done for or in connection with the performance of its functions and the achievement of its purposes and objectives under this Act.

### **8. COMMITTEES OF THE INSTITUTE.**

(1) The Institute may, from time to time, establish committees pursuant to Section 25 of the *National Institute of Standards and Industrial Technology Act 1993*, for the purposes of this Act.

(2) Each committee appointed shall report to the Institute on its activities respectively at such times as the Institute directs.

### **9. DELEGATION BY THE INSTITUTE.**

The Institute may, in writing by the Director-General, delegate all or any of its powers and functions under this Act, except for this power of delegation.

## **PART III. - RADIATION CONTROL ADVISORY PANEL.**

### **10. ESTABLISHMENT OF THE RADIATION CONTROL ADVISORY PANEL.**

(1) There is established a panel called the Radiation Control Advisory Panel.

(2) The Panel shall provide technical advice and any other related advice on any matter to the Institute pertaining to the performance of its functions and the exercise of its powers under this Act.

### **11. MEMBERSHIP OF THE PANEL.**

(1) The Minister, acting on the advice of the Director-General in consultation with the Council of the Institute, shall appoint, by notice in the National Gazette, the following members of the Panel:

- (a) an expert in the area of radiation; and
- (b) a representative with sufficient knowledge and experience from the department responsible for environmental protection matters; and
- (c) a legal expert with sufficient knowledge and experience in nuclear law; and
- (d) a representative with sufficient knowledge and experience from the department responsible for national security co-ordination and assessment matters; and
- (e) an independent medical expert with specialised knowledge on radiation and radiation related matters.

## *Radiation Safety and Control*

(2) The members of the Panel shall elect amongst themselves the Chairperson and Deputy Chairperson to preside in their meetings.

(3) A person in Subsection (1) shall be a member of the Panel for a term of four years and is eligible for re-appointment.

### **12. LEAVE OF ABSENCE.**

The Minister may grant leave of absence to a member of the Panel on such terms and conditions as the Minister determines.

### **13. VACATION OF OFFICE.**

(1) A member, or the Chairperson or Deputy Chairperson may resign his office by writing, signed by him and addressed to the Minister.

(2) If a member, or the Chairperson or Deputy Chairperson -

(a) dies; or

(b) resigns his office in accordance with Subsection (1); or

(c) becomes permanently incapable of performing his duties; or

(d) is absent, except with the written consent of the Chairperson, from three consecutive meetings of the Council; or

(e) fails to comply with Section 19; or

(f) becomes bankrupt, or applies to take the benefit of any law for the benefit of bankrupt or insolvent debtors, compounds with his creditors or makes an assignment of his remuneration for their benefit; or

(g) is convicted of an offence punishable under law by imprisonment for one year or longer, or by death and as a result of the conviction, is sentenced to imprisonment or death,

the Minister shall terminate his appointment.

(3) The Minister may, at any time, by written notice, advise a member, the Chairperson or Deputy Chairperson, that he intends to terminate the appointment of the member, the Chairman or the Deputy Chairman on the grounds of inefficiency, incapacity or misbehaviour.

(4) Within 14 days of the receipt of a notice under Subsection (3), the member, Chairperson or Deputy Chairperson, as the case may be, may reply in writing to the Minister, who shall consider the reply and where appropriate, terminate the appointment.

(5) Where the member, the Chairperson or Deputy Chairperson, as the case may be, does not reply in accordance with Subsection (4), his appointment is terminated.

### **14. VACANCY NOT TO AFFECT POWERS AND FUNCTIONS.**

The exercise of a power or the performance of a function of the Panel is not invalidated by reason of a vacancy in the membership of the Panel.

### **15. DECISIONS OF THE PANEL.**

(1) The decisions of the Institute under this Act shall be based on the technical advice and recommendations of the Panel.

## *Radiation Safety and Control*

(2) For the purposes of this Act, technical advice and recommendations provided by the Panel refer to such matters requiring technical expertise that may not ordinarily be possessed by the Institute, or on deliberations on activities or practices exceeding a certain dose limit or threshold established under the Regulations.

(3) Nothing shall affect the independence of the Panel in its decisions.

### **16. REMUNERATIONS OF THE PANEL.**

A person appointed as a member of the Panel shall be paid such remuneration and allowances as determined by the Minister.

### **17. CALLING OF MEETINGS.**

(1) The Panel shall meet as and when the Institute refer matters to it to deliberate upon those matters, or as requested by the Minister.

(2) The Panel shall meet as often as the business of the Panel requires and at such times and places as the Panel determines, or as the Chairperson or in his absence the Deputy Chairperson directs, but in any event shall meet not less frequently than once in every three months.

(3) Where he receives a request to call a meeting by the Institute or by the Minister, or by not less than two members, the Chairperson or in his absence, the Deputy Chairperson shall convene a meeting of the Panel within 14 days.

(4) For the purposes of Subsection (2), the Chairperson or the Deputy Chairperson, as the case may be, shall give to every member at least 14 days' notice of the meeting.

(5) The Institute may, from time to time, request the Panel to meet and consider and advise the Institute on any matter the Institute may put to the Board.

### **18. MEETINGS OF THE PANEL.**

(1) At a meeting of the Panel -

(a) three members constitute a quorum; and

(b) the Chairperson, or in his absence, the Deputy Chairperson, shall preside, but if both the Chairperson and Deputy Chairperson are absent, the members present shall appoint a Chairperson for the meeting from amongst their own number; and

(c) matters arising shall be decided by a majority of the votes of the members present and voting; and

(d) the person presiding has a deliberative, and in the event of an equality of votes on any matter, also a casting vote.

(2) The Panel shall cause minutes of its meetings to be recorded and kept.

(3) Subject to this Act, the procedures of the Panel are as determined by the Panel.

(4) A person shall not be a member of the Panel if he or the organisation he represents is a user of radiation sources.

**19. DISCLOSURE OF INTEREST BY MEMBER.**

(1) At any meeting of the Panel, where a member has a direct or indirect personal interest in a matter being considered or about to be considered by the Panel, he shall, as soon as possible after the relevant facts have come to his knowledge, disclose the nature of the interest.

(2) A disclosure under Subsection (1), shall be recorded in the minutes of the Panel and the member -

- (a) shall not take part after the disclosure, in any deliberation or decision of the Panel in relation to the matter; and
- (b) shall be disregarded for the purpose of constituting a quorum of the Panel for any such deliberation or decision.

**PART IV. - ADMINISTRATION OF THE REGULATORY BODY.**

**20. FUNCTIONS OF THE DIRECTOR-GENERAL.**

The Director-General has the following functions:

- (a) to perform all functions necessary for the good and impartial administration of this Act; and
- (b) to provide the necessary reports or summaries or actions taken and decisions made under this Act or any other law.

**21. DELEGATION BY THE DIRECTOR-GENERAL.**

The Director-General may, in writing, delegate all or any of his powers and functions under this Act, except for this power of delegation.

**22. STAFF.**

The Institute -

- (a) may appoint such persons as it considers fit and necessary to be officers of the Institute for the purposes of this Act; and
- (b) shall determine the terms and conditions of employment of the staff.

**23. PUBLIC SERVICE RIGHTS.**

If a person appointed under Section 22 was, immediately before his appointment, an officer of the Public Service, his service as an officer of the Institute shall be counted as service in the Public Service for the purpose of determining his existing and accruing rights under the *Public Service (Management) Act 2014*.

**24. ANNUAL REPORTS.**

(1) The Institute shall furnish to the Minister, before 31 March in each year, a report on its progress, performance and operations in relation to its functions in respect of the preceding year ending 31 December.

(2) The Institute shall furnish to the Minister such other reports that the Minister may require, at such other intervals as the Minister may determine.

**25. FINANCES.**

Part V of the *National Institute of Standards and Industrial Technology Act 1993*, applies to the finances of the Institute.

**PART V. - LICENCES.**

**26. NOTIFICATION.**

(1) A person who intends to engage in an activity or practice shall submit a prior notification to the Institute of his intention to carry out such activity or practice in the prescribed form and within the time limits established by the Institute.

(2) The Institute may, upon determining the notification, decide whether the person is to apply for a licence or be exempted under Section 32.

**27. LICENCE GENERALLY.**

(1) A person shall apply for a licence to carry out activities and practices.

(2) A person shall not, without a licence, conduct an activity or practice unless -

(a) he or it is licensed by the Institute; or

(b) the radiation source or practice has been exempted from regulatory control.

(3) A requirement for licence under this part is without prejudice to licences under any other laws.

**28. APPLICATION FOR LICENCE.**

(1) A person shall apply to the Institute for a licence or for a renewal or variation of a licence.

(2) The application shall be in the prescribed form and be accompanied by the prescribed fee.

(3) The application shall contain any information that the Institute may require.

(4) The Minister may prescribe the licence fees by notice in the National Gazette.

**29. SCOPE OF THE LICENCE.**

The Institute shall specify the scope of a licence in relation to certain activities and practices, but must not cover more than one facility.

**30. GRANT OF LICENCE.**

(1) The Institute may grant a licence to an applicant if the applicant shows that -

(a) the activities and practices can be conducted in a manner that adequately ensures the protection of the people and the environment; and

(b) the activities and practices are only conducted for peaceful purposes; and

(c) the premises have been constructed and equipped with the essential services installed in compliance with the prescribed requirements set by the Institute; and

(d) the facilities are manufactured, constructed, shielded and installed in a satisfactory way that the facility may be used without injury to the health of persons; and

(e) the activities and practices are conducted in compliance with the fundamental principles of radiation protection under the schedule; and



## *Radiation Safety and Control*

- (f) adequate measure is taken to ensure adequate defense against radiological hazards, and that the appropriate emergency plans are developed and submitted to the Institute; and
  - (g) adequate financial arrangements are made for radioactive waste management, disposal or decommissioning.
- (2) The licence holder shall -
- (a) register with the Institute, radiation sources being used in connection with activities, practices and facilities; and
  - (b) submit information relating to the types and quantities of radiation sources, in addition to other information required by the Institute.

### **31. REFUSAL OF LICENCE.**

- (1) The Institute shall refuse to grant or renew a licence if -
- (a) it is satisfied that the person making an application for a licence is not a fit and proper person for purpose of this Act; or
  - (b) it is not satisfied that exposure to persons will be minimised in accordance with the three fundamental principles of radiation protection under the schedule; or
  - (c) it is not satisfied that the premises to which the application relates, and any premises affected by the proposed use of the premises to which the application relates, comply with the safety and security requirements under this Act; or
  - (d) it is not satisfied that the safety requirement is met, whether the aspect of safety in question is immediate or relates to the long term or cumulative potential effects of radiation; or
  - (e) it is not satisfied that the radioactive substance, radiation source or radiation generator -
    - (i) is likely to produce a positive net benefit, having regard to the potential hazard of a nature, such as to justify its use; or
    - (ii) performs a function which can be fulfilled only by a radioactive method, or so fulfilled that the radioactive method has clear advantages over any other practical methods; or
  - (f) it is not satisfied as to the justification for the use of the specific radionuclide or as to the use of the radioactive material in the form, quantity or quality proposed; or
  - (g) it is of the opinion that public health, public safety and security, demands such a refusal; or
  - (h) it determines that the specific requirements under this Act have not been complied with.
- (2) The Institute may act at its own discretion to determine whether or not there are grounds on which to refuse an application for the grant or renewal of a licence or an exemption is to be refused.
- (3) The Institute may, at its own discretion, refuse an application on any other grounds.
- (4) In exercising its discretion, the Institute may have regard to recommendations, guidelines or practices of the IAEA and such other bodies possessing relevant expertise as the Institute may think appropriate.

## *Radiation Safety and Control*

### **32. EXEMPTION FROM LICENCE.**

The Institute may exempt an applicant from being granted a licence due to the following:-

- (a) that the radiation risk for persons is sufficiently low to be of no regulatory concern; or
- (b) that the collective radiological impact is sufficiently low that regulatory control is not warranted; or
- (c) that the activity, practice or source is considered to be safe, with no likelihood of creating situations that could result in a failure to meet the criteria under Paragraphs (a) and (b).

### **33. CONDITIONS FOR LICENCE.**

(1) The Institute shall establish requirements, procedures and criteria for an application or renewal of a licence.

(2) The Institute shall subject a licence to such general or specific conditions, restrictions or limitations set out in Subsection (3) as it deems necessary.

(3) Without limiting the generality of this provision, the Institute shall impose -

- (a) general conditions, restrictions or limitations that would ordinarily apply to certain activities, practices or facilities; or
- (b) specific conditions, restrictions or limitations relating to -
  - (i) the type or nature of radiation source or radiation generator; and
  - (ii) the manner and intended use of the radiation source or radiation generator; and
  - (iii) the place at or circumstances in which activities or practices will be conducted or the facilities will be operated; and
  - (iv) the persons who are authorised to conduct the activities and practices; and
  - (v) the use of premises relating to the safe and secure conduct of activities and practices in such premises; and
  - (vi) other conditions, restrictions or limitations necessary for the implementation of this Act.

(4) A condition, restriction or limitation may be varied from time to time as determined by the Institute.

(5) The conditions, restrictions or limitations shall be taken into consideration during inspections and enforcement.

### **34. VARIATION OF LICENCE.**

(1) The Institute may vary a licence on its own motion or on the application of the holder of the licence.

(2) The holder of a licence or a person who has been exempted under Section 32 shall advise the Institute -

- (a) of any variances to the radiation sources or conduct of activities and practices; and
- (b) on any new circumstances regarding activities and practices which have become known after a licence or an exemption has been granted.

## *Radiation Safety and Control*

(3) The holder of a licence or an exempted person shall furnish any change of circumstances to the Institute in writing as soon as the information is known.

- (4) Where information on a change of circumstances is known by the Institute -
- (a) it shall take the necessary actions to verify and correct the information; or
  - (b) it may amend an authorisation or exemption; or
  - (c) it may require a new application to be made based on the new information furnished.

### **35. TERM OF LICENCE.**

A licence remains in force, if -

- (a) it is not cancelled or surrendered sooner for the term specified in the licence by the Institute; or
- (b) an application to renew the licence is made in accordance with this part and received by the Institute before or within 60 days after the end of that specified term, until the application is determined.

### **36. CANCELLATION OF LICENCE.**

(1) The Institute may suspend or cancel a licence on any grounds if it is satisfied of any one or more of the following:-

- (a) that the grant of the licence was made in error or obtained improperly; or
- (b) that the holder of a licence is not a fit and proper person to hold the licence; or
- (c) that the holder of the licence has contravened a condition of it; or
- (d) that the holder of a licence has been convicted of an offence against this Act or any other relevant legislation; or
- (e) that the holder has ceased to hold a qualification which was the basis on which the Institute granted the licence.

(2) A licence -

- (a) cancelled under this section ceases to be in force or effect; or
- (b) suspended under this section is not in force or effect for the period of the suspension.

(3) The holder of the licence which is suspended or cancelled shall surrender the licence to the Institute.

(4) A person who fails to comply with Subsection (3), commits an offence and shall be dealt with under Sections 72 and 73.

### **37. SALES AND PURCHASES.**

(1) A person who sells any radiation source or radioactive material which requires a licence shall -

- (a) ensure that the purchaser produces evidence that he holds the relevant licence or has been granted an exemption; and
- (b) immediately notify the Institute in writing specifying the name and address given by the purchaser, details of the purchase and particulars of the relevant licence or exemption.

## *Radiation Safety and Control*

(2) A person who purchases, within or outside Papua New Guinea, any radiation source or radioactive material which is intended to be used in connection with activities, practices or facilities in Papua New Guinea which requires a licence, shall -

- (a) immediately notify the Institute in writing; and
- (b) make an application to the Institute for authorisation of the radioactive substance, radiation source or any radiation generator or for the grant of an exemption.

### **38. REGISTERS.**

- (1) The Institute shall maintain a register of licences under this part.
- (2) The register shall contain the following information in relation to each licence:-
  - (a) the name of the holder of the licence; and
  - (b) the type and number of the licence; and
  - (c) the expiry date of the licence; and
  - (d) the status of the licence; and
  - (e) such other information as may be prescribed by the regulations.
- (3) The register shall contain the following further information:-
  - (a) the types and quantities of radiation sources authorised; and
  - (b) radiation sources and information relating to imports and exports; and
  - (c) facilities and other premises where activities and practices are being conducted; and
  - (d) nuclear material as required under the Safeguards Agreement; and
  - (e) any other information, records or registries relating to the functions of the Institute under this Act that needs to be collected for purposes of maintaining accurate records of activities, practices and facilities.
- (4) The Institute shall make the register available to members of the public to inspect free of charge -
  - (a) at its principal office during ordinary office hours; and
  - (b) on its website.

## **PART VI. - LICENCE FOR TRANSPORTATION OF RADIOACTIVE MATERIALS.**

### **39. LICENCE FOR TRANSPORTING RADIOACTIVE MATERIAL.**

Without prejudice to the requirements of any other law, no person shall transport any radioactive material if he is not issued a licence to do so by the Institute.

### **40. SAFETY AND SECURITY OF RADIOACTIVE MATERIAL.**

An authorised person shall take the necessary measures to ensure the safety and security of radioactive material during transportation either by land, sea or air in accordance with the requirements established by the Institute.

### **41. REQUIREMENTS FOR TRANSPORTATION OF RADIOACTIVE MATERIAL.**

The Institute shall establish the following requirements for the transportation of radioactive material to and from overseas or within Papua New Guinea:-

## *Radiation Safety and Control*

- (a) categorisation of radioactive material that takes into account the protection hazards posed by the types, quantities and activity levels of such material; and
- (b) technical requirements that take into account the IAEA Regulations for the safe transportation of radioactive material; and
- (c) requirements under the other laws in force in Papua New Guinea; and
- (d) other requirements established by the Institute or other relevant authority which are deemed necessary for the purposes of this section.

### **PART VII. - LICENCE FOR RADIOACTIVE WASTE MANAGEMENT.**

#### **42. LICENCE FOR RADIOACTIVE WASTE MANAGEMENT.**

Without prejudice to the requirements of any other law, no person shall engage in radioactive waste management if he is not issued with a licence to do so by the Institute.

#### **43. GENERAL PRINCIPLES ON RADIOACTIVE WASTE MANAGEMENT.**

(1) An authorised person must take into account the following principles during radioactive waste management:-

- (a) radioactive waste is kept to the minimum practicable terms of activity and volume; and
- (b) resultant harm from current radioactive waste management and potential harm in the future is avoided; and
- (c) all hazards associated with radioactive waste management are adequately dressed; and
- (d) people, property and the environment are protected.

(2) An authorised person shall ensure the safety and security of radioactive waste during all stages of radioactive waste management.

#### **44. REQUIREMENTS FOR MANAGING RADIOACTIVE WASTE.**

(1) The Institute shall establish -

- (a) a criteria for licencing and requirements for managing radioactive waste; and
- (b) safety and security requirements; and
- (c) a system of institutional control in the case of disposal facilities.

(2) The Institute, in addition to other requirements -

- (a) may establish requirements to ensure that the authorised person has financial resources available for the safe and secure management of radioactive waste; and
- (b) may establish a requirement for a contract to be entered into between the authorised person and the supplier of a radioactive source for the return of such radioactive or radiation source at the end of its useful life; and
- (c) may establish requirements for decommissioning; and
- (d) shall make arrangements for the safe and secure management of orphan sources and radioactive waste for which no authorised person can be identified.

#### **45. IMPORT OF RADIOACTIVE WASTE.**

(1) A person shall not import into the country radioactive waste that is generated outside Papua New Guinea under any circumstances.

## *Radiation Safety and Control*

(2) A person who contravenes Subsection (1), commits a criminal offence and shall be dealt with under Section 81.

### **46. EXPORT OF RADIOACTIVE WASTE.**

(1) A person shall not export radioactive waste if that person does not have a licence issued by the Institute.

(2) A licence for export of radioactive waste may only be granted if the Institute is satisfied that -

- (a) the importing State will be notified of the transfer of radioactive waste; and
- (b) the movement of the exported material conforms to the provisions on transportation under this Act or other law, and the relevant international obligations in all States through which the radioactive waste will transit; and
- (c) the importing State has the regulatory and technical capacity to manage the exported radioactive waste; and
- (d) any other considerations the Institute may deem necessary with due regard to safety and security of radioactive material.

## **PART VIII. - LICENCE FOR EXPORT AND IMPORT CONTROL.**

### **47. WITHOUT PREJUDICE.**

This part applies without prejudice to the provisions of Part VII.

### **48. LICENCE FOR EXPORTS AND IMPORTS.**

(1) A person shall not export or import a controlled good without a licence from the Institute.

(2) The Institute shall set the following requirements for the licencing process for exports and imports of controlled goods:

- (a) the procedures for applying for an authorisation, including schedules for reviewing and deciding on applications; and
- (b) a list of goods requiring a licence; and
- (c) provision for periodic revision or updating of lists of controlled goods to reflect developments in technology or changes in relevant circumstances; and
- (d) criteria for the evaluation of an application and issuance of a licence; and
- (e) end user controls; and
- (f) requirements for notification prior to shipment of exports where such notification has been determined to be necessary; and
- (g) a schedule of fees or charges for granting licences; and
- (h) provisions for trans-shipment of goods otherwise not requiring an export licence; and
- (i) requirements for records to be kept regarding authorised activities; and
- (j) protection of confidential information relating to authorised activities; and
- (k) export licencing criteria; and
- (l) import licencing criteria.

(3) Review and approval of licence shall be conducted with the participation and concurrence of the Institute.

**PART IX. - RADIATION PROTECTION.**

**49. FUNDAMENTAL PRINCIPLES OF RADIATION PROTECTION.**

(1) The fundamental principles of radiation protection under the schedule shall apply to all activities and practices.

(2) The Institute is to establish radiation protection requirements for medical, occupational and public exposure.

(3) An authorised person shall ensure that the activities and practices are safe for the purposes of this Act.

**50. MEDICAL PRACTICES.**

In addition to the requirements under Part V, the Institute shall establish the following requirements on the use of radiation sources for medical practices:-

- (a) qualifications of persons carrying out medical practices involving radiation sources and radiation generator; and
- (b) measures for the protection of persons using radiation sources; and
- (c) measures to protect patients, including the justification of practices and optimisation of exposures; and
- (d) design and performance criteria for radiation generator; and
- (e) measures for the safety and security of radiation sources.

**51. PROTECTION OF PATIENTS.**

(1) An authorised person of a health facility who carries out medical practices shall ensure that no patient is administered a diagnostic or therapeutic exposure unless the exposure is prescribed by a medical practitioner.

(2) The medical practitioner shall ensure that there is overall patient protection and safety in the prescription of, and during the delivery of medical exposures.

**52. OCCUPATIONAL EXPOSURE.**

(1) The Institute shall -

- (a) establish requirements for occupational exposure to ensure that protection and safety is optimised; and
- (b) establish requirements for the monitoring and recording of occupational exposures in planned exposure situations, and may enforce compliance with dose limits for occupational exposure and requirements.

(2) For the purpose of this section “planned exposure” refers to a situation of exposure that arises from the planned operation of a radiation source or from a planned activity that results in an exposure due to a radiation source.

(3) An authorised person shall -

- (a) ensure that workers are protected against occupational exposure; and
- (b) ensure that protection and safety is optimised; and
- (c) ensure that the dose limits for occupational exposure are not exceeded.

**53. PUBLIC EXPOSURE.**

The Institute -

- (a) shall establish requirements and dose limits for public exposure and for optimisation; and
- (b) may enforce the requirements.

**PART X. - INSPECTION AND ENFORCEMENT.**

*Division 1. - Inspection.*

**54. CONDUCTING INSPECTIONS.**

(1) The Institute shall conduct -

- (a) general inspections for the purposes of this Act; and
- (b) programed and reactive inspections,

with or without prior notice.

(2) The Institute shall establish and maintain inspection programs following a graded approach.

**55. POWER OF ENTRY AND INSPECTION.**

(1) An authorised officer may, at any time, enter premises if the authorised officer reasonably suspects that an activity or practice is being conducted illegally on the premises.

(2) The authorised officer has the authority to enter a premises or facility where activities or practices are being carried out and conduct inspections and to carry out examinations as may be necessary to -

- (a) obtain information, records or documents, electronic or physical, about the status of radiation safety and security; or
- (b) verify compliance with the provisions of this Act and conditions of a licence and to verify compliance with the Safeguards Agreement; or
- (c) investigate any incident or accident involving nuclear material or radiation sources; or
- (d) interview any person whose duties which, in the view of the authorised officer, may be relevant to the inspection being carried out; or
- (e) conduct tests, experiments or examinations on facilities and premises to ensure that activities and practices are being conducted in accordance with this Act.

**56. NOTICE FOR INSPECTION.**

(1) The Institute or the authorised officer may serve a notice under this section on an authorised person that an inspection is to be conducted in his premises if the Institute, or the authorised person, believes on reasonable grounds that the authorised person is, or is likely to become, responsible for -

- (a) a contravention of this Act, the regulations or the conditions of a licence or the suspension, cancellation or surrender of a licence; or
- (b) unnecessary exposure to or contamination by radiation.

(2) Notwithstanding Subsection (1), inspections without prior notice may be conducted, including but not only in exceptional circumstances.



## *Radiation Safety and Control*

(3) The Institute or the authorised officer may engage the assistance from national or international experts, or officials from other relevant government agencies as necessary for the purposes of carrying out an inspection or examination.

(4) For the purposes of Subsection (2), an exceptional circumstance may include but is not limited to nuclear or radiological emergencies, security or criminal violations, or other circumstances where safety and security is compromised and it is in the public interest to conduct such inspections.

(5) The authorised officer shall, when entering premises or facilities to conduct an inspection, take reasonable measures and use reasonable force at all times.

(6) The authorised person shall -  
(a) co-operate and provide the means necessary for; and  
(b) comply with any directions as to the making of,  
any entry, inspection, examination or inquiry required by an authorised officer and shall furnish such further or other assistance as he considers necessary.

(7) The authorised officer shall produce a written report, as soon as practicable, stating the findings of the inspection and make the written report available to the authorised person.

### **57. NO OBSTRUCTION.**

(1) No authorised person shall obstruct the Institute or an authorised officer from carrying out an inspection.

(2) A person who contravenes Subsection (1), commits an offence and shall be dealt with under Sections 72 and 73.

## *Division 2. - Enforcement.*

### **58. POWERS IN THE CASE OF BREACH.**

(1) The Institute shall take enforcement action in the case of a breach or non-compliance with this Act or conditions of a licence.

(2) Where an authorised person -  
(a) breaches this Act; or  
(b) contravenes the conditions of a licence or an exemption,  
the Institute shall take the necessary enforcement actions commensurate with the seriousness of the breach or contravention.

(3) The authorised person shall, subject to enforcement action, take the necessary measures to remedy the breach or contravention as required by the Institute and the necessary measures to prevent a re-occurrence.

(4) The Institute may take one or a combination of the following administrative actions where there is a breach or non-compliance:-

## *Radiation Safety and Control*

- (a) issue a warning and determine the period of time during which remedial action must be taken; or
- (b) suspend, revoke or modify the terms and conditions of the licence; or
- (c) revoke the licence and give directions to remedy an unsafe or unsecure condition.

### **59. POWER TO GIVE DIRECTIONS.**

(1) Where an authorised officer is of the opinion that an authorised person who is carrying out an activity or practice, or operating a facility is in breach of this Act or is not complying with the conditions of the licence, the authorised officer may issue immediate directions to -

- (a) temporarily suspend the activity, practice or facility; or
- (b) order the authorised person or entity to prohibit workers who do not meet the applicable requirements for engaging in activities and practices or working in a facility; or
- (c) order the radioactive material originating from a suspended activity or practice to be safely or securely stored or disposed.

(2) The Institute may -

- (a) order the seizure and detention; or
- (b) seek court orders for forfeiture,

of a radiation source or nuclear material in consultation and co-operation with the relevant government agencies.

(3) An administrative direction issued by the Institute under this division does not preclude any other civil or criminal action being brought against a person for a breach under this Act or any other law.

(4) Directions issued by an authorised officer shall continue in force until such time where the actions are -

- (a) withdrawn by the authorised officer; or
- (b) reversed or modified by the Institute; or
- (c) altered through an administrative decision or court order.

(5) The authorised officer must, as soon as practicable, provide a written notice to the authorised person stating -

- (a) the findings of an inspection or examination, directions issued and reasons for issuing such directions; and
- (b) inform the authorised person of the administrative avenues available to object to the decision of the authorised officer or the Institute.

(6) The authorised person to whom a notice containing directions is given under this section shall take all reasonable steps to bring the substantive requirements of those directions to the knowledge of all persons likely to be affected.

(7) A direction issued under this section may be amended or modified at any time by the Institute.

**PART XI. - RADIOACTIVE SOURCES.**

**60. CATEGORISATION OF RADIOACTIVE SOURCES.**

- (1) The Institute shall -
  - (a) establish a system of categorisation of radioactive sources; and
  - (b) prescribe requirements for the system of categorisation.

(2) The system of categorisation is to be based on the potential risk, as assessed against internationally recognised standards that such sources may pose if not safely managed or securely protected.

**61. RECOVERY OF ORPHAN SOURCES.**

(1) An authorised person shall immediately report any loss of control over a radioactive source or any situation or incident including theft, in connection with a radioactive source that may pose a significant risk of injury to persons, damage to property or the environment.

(2) The Institute shall co-ordinate and co-operate with the relevant government agencies to ensure the recovery of orphan sources.

(3) The Institute shall develop a national strategy for gaining or regaining control over orphan sources.

- (4) The national strategy is to be approved by the National Executive Council.

**PART XII. - EMERGENCY PREPAREDNESS AND RESPONSE.**

**62. EMERGENCY PLANS.**

(1) The Institute shall not grant authorisation to conduct an activity or practice unless the applicant has developed an appropriate emergency preparedness and response plan and this plan has been approved by the Institute.

(2) The Institute shall provide for requirements and the details to be contained in an emergency plan.

(3) Emergency plans for activities, practices and facilities or sources that could potentially cause severe damage or set off a nuclear or radiological emergency shall be developed and co-ordinated in co-operation with the relevant emergency response agencies.

(4) An authorised person shall periodically review, update and test emergency plans on his own volition, or as determined by the Institute.

(5) The authorised person shall implement the approved emergency plan where there is a nuclear or radiological emergency.

**63. NATIONAL EMERGENCY PLAN.**

(1) The Institute shall co-ordinate with the relevant bodies and provide advice to develop, and implement, where required, a National Emergency Plan for responding to potential nuclear or radiological emergencies.

## *Radiation Safety and Control*

(2) The National Emergency Plan shall be approved by the National Executive Council.

(3) The National Emergency Plan shall set out the roles, responsibilities and actions to be taken by relevant governmental and non-governmental bodies.

(4) The Institute shall develop an off-site emergency plan for co-ordinating the national response plan.

### **64. POWERS DURING NUCLEAR OR RADIOLOGICAL EMERGENCY.**

(1) In the event of a nuclear or radiological emergency, the Institute shall organise and gather other relevant agencies for a national response.

(2) The Institute may, pursuant to the National Emergency Plan, issue directions or take appropriate measures -

- (a) to prepare for and mitigate damage or harm during emergency situations; and
- (b) to organise and carry out emergency response to avoid a serious radiation hazard and meet the emergency without delay.

## **PART XIII. - NUCLEAR SAFEGUARDS AND PHYSICAL PROTECTION.**

### *Division 1. - Nuclear Security.*

### **65. GENERAL RESPONSIBILITIES FOR PHYSICAL PROTECTION.**

(1) An authorised person shall ensure the physical protection of nuclear and other radioactive material used in connection to activities, practices or facilities.

(2) An authorised person shall, where theft, threat of theft or loss of nuclear or other radioactive material occurs -

- (a) immediately notify the Institute; and
- (b) submit a report containing details of the incident, as soon as possible after providing notice; and
- (c) furnish additional information required.

(3) The Institute shall establish physical protection requirements for nuclear and other radioactive material based on a categorisation on the material and an assessment of the threat to be made in co-ordination with the relevant national agencies.

(4) The Institute shall co-operate and facilitate exchanges of information and assistance where there is a nuclear security incident which may cause harm outside of Papua New Guinea.

(5) Where a nuclear security incident occurs or is likely to occur, the Institute shall co-operate with the relevant national offices for the recovery and protection of nuclear and other radioactive material.

## *Radiation Safety and Control*

### *Division 2. - Safeguards.*

#### **66. INTERPRETATION OF THIS DIVISION.**

For the purpose of this division, “facility” means -

- (a) a reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant or a separate storage installation; or
- (b) any location where nuclear material in amounts greater than one effective kilogram is customarily used.

#### **67. RESPONSIBILITY OF INSTITUTE IN RELATION TO SAFEGUARDS.**

The Institute shall monitor and ensure the implementation of the obligations of Papua New Guinea under the Safeguards Agreement.

#### **68. GENERAL PRINCIPLES ON SAFEGUARDS.**

(1) Nuclear material shall exclusively be used for peaceful purposes and in accordance with the relevant international obligations and the Safeguards Agreement.

(2) The following use of nuclear weapons and other explosive devices are prohibited in Papua New Guinea:-

- (a) the direct or indirect control over nuclear weapons or explosive devices; and
- (b) the manufacture or other acquisition of nuclear weapons or explosive devices; and
- (c) the seeking or receiving of any assistance in the manufacture of nuclear weapons or explosive devices.

#### **69. CO-OPERATION IN APPLICATION OF SAFEGUARDS.**

Without limiting the generality of the obligations under any of the relevant international instruments, the Institute, other relevant bodies and authorised persons shall co-operate fully with the IAEA in the application of safeguard measures by -

- (a) promptly providing the necessary information required under the Safeguards Agreement; and
- (b) providing access to locations as required under the Safeguards Agreement; and
- (c) providing support to IAEA inspectors in the performance of their tasks; and
- (d) rendering all necessary services in connection with access by IAEA inspectors; and
- (e) maintain the relevant systems of accounting for the control of nuclear material.

#### **70. RESPONSIBILITY OF AUTHORISED PERSONS.**

An authorised person shall, as specified by the Institute -

- (a) maintain records required and prescribed by the Institute; and
- (b) submit the prescribed reports to the Institute in the form, and at times, specified by the Institute; and
- (c) perform the measurements of nuclear material and maintain required measurements control programmes; and
- (d) provide the Institute with information regarding the design of any nuclear facility, including any design changes; and
- (e) conduct physical inventories of nuclear material; and
- (f) give notice to the Institute of the import or export of nuclear material; and

## *Radiation Safety and Control*

- (g) maintain physical protection and other security measures with respect to nuclear material; and
- (h) immediately report any loss of nuclear material in excess of limits prescribed by the Institute; and
- (i) provide reports on planned future activities.

### **PART XIV. - APPEALS.**

#### **71. APPEALS PANEL.**

(1) There shall be an independent Appeals Panel established for the purpose of reviewing decisions taken under this Act.

(2) The Appeals Panel shall comprise of suitably qualified members with the relevant expertise in the operation and administration of nuclear energy who will be appointed by the Minister on an adhoc basis.

(3) Any person aggrieved by the decision of or direction taken by the Institute, may appeal to the Appeals Panel.

(4) An application for appeal shall be made within 60 days from notice of a decision or direction by the Institute.

### **PART XV. - OFFENCES AND PENALTIES.**

#### *Division 1. - Administrative Offences.*

#### **72. ADMINISTRATIVE OFFENCES.**

- (1) A person who -
- (a) conducts an activity or practice or operates a facility without a licence; or
  - (b) when required to do so under this Act, fails to furnish within a reasonable time, any information which the Institute or an authorised officer has asked for in relation to any matter; or
  - (c) furnishes false or misleading information; or
  - (d) fails to comply with a direction or decision of the Institute; or
  - (e) fails to notify the Institute pursuant to Section 26; or
  - (f) does not comply with a condition, restriction or limitation of a licence; or
  - (g) interferes with the performance of the responsibilities of an authorised officer; or
  - (h) fails to notify the Institute of theft or unlawful taking of radiation sources or nuclear material; or
  - (i) contravenes any provision of this Act,
- commits an offence under this section.

## *Radiation Safety and Control*

- (2) In relation to inspections carried out under this Act, a person commits an offence if he -
- (a) assaults, resists or impedes, delays or in any way obstructs an authorised officer in the exercise of his powers or in the discharge of his duties under this Act or fails to comply in any respect with the lawful written request, requirement, direction or order of an authorised officer; or
  - (b) fails, without lawful excuse, to answer any question put to him in pursuance of this Act by an authorised officer or a person acting as professional or expert adviser to, or interpreter for, an authorised officer or otherwise to furnish information lawfully required under this Act; or
  - (c) furnishes false or misleading information, directly or indirectly prevents any person from appearing before or being questioned by an authorised officer or otherwise furnishing information; or
  - (d) fails to produce any register, record, notice or other document which by or under this Act is required to produce or fail to allow an authorised officer, upon producing the same to make copies or take extracts from it or any part of it or of any entries in the extract; or
  - (e) fails to allow any authorised officer to inspect, examine, test, calibrate or take anything or sample of anything which the authorised officer has reasonable grounds for believing to be a radioactive substance or radiation generator; or
  - (f) fails to permit any inspection or examination of any premises lawfully required under this Act; or
  - (g) when required by or under this Act to furnish assistance to any person, fails without lawful excuse to furnish that assistance.
- (3) An offence under this section shall be dealt with in accordance with Section 73.

### **73. ADMINISTRATIVE PENALTIES.**

- (1) Where a person commits an offence under Section 72, the Institute may -
- (a) issue directions pursuant to Section 59; or
  - (b) fine the person a sum not exceeding K5,000.00; or
  - (c) issue any other order the Institute deems necessary which commensurate with the offence.
- (2) A person who commits an offence under Section 72 -
- (a) with the intent to cause -
    - (i) death or serious bodily harm; or
    - (ii) substantial damage to property or to the environment; or
  - (b) which causes or is likely to cause death or serious injury to any person or substantial damage to property or to the environment,

is guilty of an offence.

### *Division 2. - Criminal Offences.*

### **74. THEFT, EMBEZZLEMENT AND RELATED OFFENCES.**

A person who commits -

- (a) theft or robbery of nuclear and other radioactive material; or

## *Radiation Safety and Control*

- (b) embezzlement or fraudulent obtainment of radioactive or nuclear material; or
- (c) an act which involves the carrying, sending or moving of radioactive or nuclear material without lawful authority,

commits a criminal offence and shall be dealt with under Section 81.

### **75. HANDLING OF RADIOACTIVE OR NUCLEAR MATERIALS AND DEVICES.**

Where a person, without lawful authority, receives, possesses, transfers, alters or disposes of radioactive or nuclear material or possesses a nuclear device -

- (a) with the intent to cause -
  - (i) death or serious bodily injury; or
  - (ii) substantial damage to property or to the environment; or
- (b) which causes or is likely to cause death or serious injury to any person or substantial damage to property or to the environment,

commits a criminal offence and shall be dealt with under Section 81.

### **76. OFFENCES RELATING TO NUCLEAR FACILITIES.**

(1) Where a person uses or damages a nuclear facility, interferes with its operation, or commits any other act directed against a nuclear facility in a manner which releases or risks the release of radioactive material -

- (a) with the intent to cause -
  - (i) death or serious bodily injury; or
  - (ii) substantial damage to property or to the environment; or
- (b) with knowledge that the act is likely to cause death or serious injury to any person or substantial damage to property or to the environment by exposure to radiation or release of radioactive substances,

commits a criminal offence and shall be dealt with under Section 81.

(2) A person who demands a nuclear facility by threat or by use of force or by any other form of intimidation, under circumstances which indicate the credibility of the threat, commits a criminal offence and shall be dealt with under Section 81.

### **77. COMMUNICATION PREJUDICING SECURITY OF NUCLEAR MATERIAL OR AN ASSOCIATED ITEM.**

(1) A person who communicates information to another person knowing that the communication could prejudice the physical security of nuclear material or an associated item, commits a criminal offence and shall be dealt with under Section 81.

(2) Subsection (1) does not apply if the communication is authorised by a person who has been granted a permit to possess the nuclear material or associated item.

### **78. THREAT OR USE OF FORCE.**

(1) A person who threatens to commit an offence set out under this part in order to compel any person, international organisation or State to do or to refrain from doing any act commits a criminal offence and shall be dealt with under Section 81.

(2) A person who demands nuclear material or a device by threat or by use of force or by any other form of intimidation, under circumstances which indicate the credibility of the threat commits a criminal offence and shall be dealt with under Section 81.



**79. DEALING WITH CRIMINAL OFFENCES.**

(1) Where a person who is charged with a criminal offence under this part, is the holder of a licence under this Act, the Institute may make directions under Section 59.

(2) Where a person is convicted of a criminal offence under this part, the Institute shall make an assessment as to whether the convicted person is a fit and proper person to hold a licence or be exempt under this Act, and may -

- (a) revoke a licence or exemption; or
- (b) refuse future licence or exemption for a specified period; or
- (c) make other administrative orders that it deems necessary.

**80. OFFENCES BY CORPORATIONS.**

(1) If a corporation contravenes any provision of this Act or the regulations, each person who is a director of the corporation or who is concerned in the management of the corporation is to be taken to have contravened the same provision if the person knowingly authorised or permitted the contravention.

(2) A person may be proceeded against and convicted under a provision pursuant to Subsection (1), whether or not the corporation has been proceeded against or convicted under that provision.

(3) Nothing in this section affects any liability imposed on a corporation for an offence committed by the corporation against this Act or the regulations.

(4) It is a defence, where a person, had no knowledge of the contravention.

**81. CRIMINAL OFFENCES.**

(1) A person who is charged for a criminal offence under this part shall be dealt with in accordance with the Criminal Code, taking into account the grave nature and elements of those offences.

(2) Criminal offences under this Act shall be dealt with as indictable offences under the Criminal Code and shall be punishable by a sentence not less than five years.

**PART XVI. - MISCELLANEOUS.**

**82. RETROSPECTIVITY.**

Prior to the commencement of this Act, the conduct of activities and practices or operation of facilities shall not be deemed to be an offence under Part X.

**83. NO DISCLOSURE OF INFORMATION.**

An authorised officer who discloses any information that has been furnished to him or obtained by him under this Act or in connection with the execution of this Act, commits an offence unless the disclosure is made -

- (a) with the consent of the person carrying on or operating the business to which that information relates; or
- (b) for the purpose of giving effect to the objects of this Act and in the performance of a duty under this Act.

## *Radiation Safety and Control*

### **84. AVAILABILITY OF RECORDS.**

(1) Documents and records held by the Institute may be made available for inspection, without charge, by the owner or any person expressly authorised by the owner of the substance, apparatus, product or premises to which those records relate.

(2) No document or record shall be made available where the *National Institute of Standards and Industrial Technology Act 1993* deems the document to be confidential in nature.

### **85. REGULATIONS.**

The Head of State, acting on the advice of the National Executive Council, may make regulations, not inconsistent with this Act, prescribing matters -

- (a) required or permitted by this Act to be prescribed; or
- (b) necessary or convenient to be prescribed for the carrying out or giving effect to this Act and its administration.

## **PART XVII. - TRANSITIONAL PROVISIONS.**

### **86. TRANSITIONAL PROVISIONS.**

(1) Within 60 days from the commencement of this Act, published in a National Gazette, persons intending to conduct or conducting activities or practices or operating facilities shall cause a notification to be made under Section 26.

(2) Where a person is informed by the Institute of the need to apply for a licence, the person shall do so within a period specified by the Institute.

### **87. SAVINGS.**

Nothing in this Act affects the validity of any act done or decision made under any Act before the coming into operation of this Act.

## **SCHEDULE.**

Section 49.

### **FUNDAMENTAL PRINCIPLES OF RADIATION PROTECTION**

<b>Justification</b>	<b>Optimisation</b>	<b>Dose Limitation</b>
No activity or practice shall be authorised unless it produces sufficient benefit to exposed persons or to society in a manner that offsets the radiation harm that it may cause, taking into account social, economic and other relevant factors.	In relation to radiation exposures from any particular activity or practice, radiation protection measures should ensure that doses, the number of persons exposed and the likelihood of incurring exposure are at all times kept as low as reasonably achievable, taking into account social and other factors.	Activities and practices should be conducted in a manner that ensures that the total dose that a person may experience does not exceed the dose limit established by the Regulatory Body, so that no person is subject to an unacceptable risk attributable to radiation exposure.

*Radiation Safety and Control*

I hereby certify that the above is a fair print of the *Radiation Safety and Control Act 2019*, which has been made by the National Parliament.

Acting Clerk of the National Parliament.

I hereby certify that the *Radiation Safety and Control Act 2019*, was made by the National Parliament on 24 January 2019.

Speaker of the National Parliament.

