LAWS OF MALAYSIA

ACT 304 ATOMIC ENERGY LICENSING ACT 1984

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ARRANGEMENT OF SECTIONS

PART I - PRELIMINARY

Section 1. Short title, commencement and application.

- (1) This Act may be cited as the **Atomic Energy Licensing Act 1984** and shall come into force on such date as the Minister may appoint by notification in the *Gazette*.
- (2) This Act shall apply throughout Malaysia.

Section 2. Interpretation.

In this Act, unless the context otherwise requires-

"appropriate authority" means-

- (a) the Director-General of Health where the activity to be licensed or licensed under this Act is in respect of a medical purpose as determined by the Board; or
- (b) the Board where the activity to be licensed or licensed under this Act is in respect of a purpose other than a medical purpose;
- "atomic energy" means all energy of whatever type derived from or created by the transmutation of atoms:

"Board" means the Atomic Energy Licensing Board established under section 3;

"conveyance" includes a ship, train, vehicle, an aircraft, and any other means of transport by which persons or goods may be carried;

"dealing", in relation to any radioactive material, nuclear material, prescribed substance or irradiating apparatus, means any activity involving the manufacturing, trading, producing, processing, purchasing, owning, using, transporting, transferring, handling, selling, storing, importing or exporting of such radioactive material, nuclear material, prescribed substance or irradiating apparatus;

"environment" shall have the meaning assigned to that expression in section 2 of the Environmental Quality Act 1974[Act 127] and, in addition thereto, shall include the marine environment;

"installation operator" means a person licensed under this Act by the appropriate authority as the operator of a nuclear installation:

"ionizing radiation" means electromagnetic radiation or corpuscular radiation capable of producing ionization in its passage through matter;

"irradiating apparatus" means apparatus capable of producing ionizing radiation;

"licensee" means the holder of a licence issued under this Act;

"nuclear damage" means any loss of life, injury to the person, loss of, loss of use of, or damage to, property, or loss in, loss of use of, or damage to, the environment, which arises out of or results from-

- (a) radioactive properties or a combination of radioactive properties with toxic, explosive or other hazardous properties of nuclear fuel or radioactive products or waste in, or of nuclear material coming from, originating in, or sent to, a nuclear installation; or
- (b) ionizing radiation emitted by any other source of radiation inside a nuclear installation; "nuclear fuel" means any material which is capable of producing energy by a self-sustaining chain process of nuclear fission, either alone or in combination with some other material, and includes fissionable material in the form of uranium metal, alloy or chemical compound, and such other material as the Board may from time to time by order in the *Gazette* determine to be nuclear fuel for the purposes of this Act;

"nuclear incident" means any occurrence or a series of occurrences, having the same origin, which causes or cause nuclear damage;

"nuclear installation" means-

- (a) any nuclear reactor other than one with which a means of sea or air transport is equipped for use as a source of power, whether for propulsion thereof or for any other purpose;
- (b) any factory using nuclear fuel for the production of nuclear material;
- (c) any factory using nuclear material for the production of nuclear fuel or any factory designed or adapted for the processing of nuclear material, including the reprocessing of irradiated nuclear fuel; or
- (d) any facility where nuclear material is placed or stored other than storage incidental to the carriage of such material:

Provided that the appropriate authority may determine that several nuclear installations of one installation operator which are located at the same site shall be considered as a single nuclear installation;

"nuclear material" means nuclear fuel or other material used for the fabrication of nuclear fuel;

"nuclear reactor" means any structure containing nuclear fuel in such an arrangement that a selfsustaining chain process of nuclear fission can occur therein without an additional source of neutrons:

"person" means any individual, partnership, private or public body whether corporate or not,

institution or organization, or any international body, institution or organization enjoying legal personality under the law of the country or the territory of the country where the nuclear installation is situated:

"prescribed" means prescribed by the Minister in regulations;

"radioactive material" means any nuclear fuel, radioactive product or radioactive waste;

"radioactive waste" means any waste which consists wholly or partly of-

- (a) a substance or article which if it were not waste would be radioactive material; or
- (b) a substance or article which has been contaminated in the course of the production, storage or use of any radioactive material, nuclear material or prescribed substance or by contact with or proximity to any other waste within the meaning of paragraph (a) of this definition;

"radiologist" means a registered medical practitioner who has received special training and has special knowledge in the use or application of ionizing radiation for diagnosing any condition of the human body;

"radiotherapist" means a registered medical practitioner who has received special training and has special knowledge in the use or application of ionizing radiation or a prescribed substance for the purpose of treating or alleviating any abnormal condition of the human body or for any other purpose requiring such specialized knowledge;

"registered dentist", "registered medical practitioner", "registered pharmacist" and "registered veterinary surgeon" mean respectively a dentist, a medical practitioner, a pharmacist and a veterinary surgeon, each registered as such in accordance with the provisions of the written laws relating to the registration of such persons;

"regulations" means regulations made under this Act;

"senior public officer" means any public officer authorized in writing generally or specially by the appropriate authority to exercise powers under this Act and includes the Director-General of Health where he is the appropriate authority;

"this Act" includes regulations and other subsidiary legislation made under this Act and anything else done under this Act or under such regulations or other subsidiary legislation.

PART II - ATOMIC ENERGY LICENSING BOARD

Section 3. Establishment of the Atomic Energy Licensing Board.

- (1) There is established for the purposes of this Act a body to be known as the Atomic Energy Licensing Board whose members shall be appointed by the Minister.
- (2) The Board shall consist of a Chairman and four other members, all of whom shall have scientific or technical qualifications relevant to atomic energy or other disciplines connected therewith. Among the members there shall be a representative each from the Ministry responsible

for health and the Ministry responsible for matters under this Act.

- (3) A member of the Board shall, unless he sooner resigns or vacates his office or his appointment is sooner revoked, hold office for a term of three years and shall be eligible for reappointment.
- (4) The appointment of any member of the Board may be revoked at any time by the Minister without assigning any reason therefor.
- (5) A member of the Board may by letter under his hand addressed to the Minister resign his office and such resignation shall become effective upon its acceptance by the Minister.
- (6) The members of the Board may be paid such allowances and other expenses in connection with the work of the Board as the Minister may from time to time determine with the concurrence of the Minister of Finance.

Section 4. Chairman of the Board.

- (1) Subject to subsection (3), the Chairman of the Board shall preside over all its meetings.
- (2) The Chairman shall not vote on any matter before the Board except as provided under subsection 6(3).
- (3) The Minister may appoint any member of the Board to act as temporary Chairman during any period when-
 - (a) the Chairman is unable for any reason to perform his duties and functions or exercise his powers under this Act; or
- (b) the office of Chairman is vacant; and any member so appointed to act as temporary Chairman may accordingly perform the duties and functions and exercise the powers of the Chairman during such period.

Section 5. Executive secretary to the Board.

The head of the department in the Ministry responsible for matters under this Act shall be the executive secretary to the Board.

Section 6. Meetings of the Board.

- (1) The Board shall meet at least three times a year at such times and at such places as the Chairman may appoint.
- (2) Four members, including the Chairman, shall constitute the quorum of the Board.
- (3) In the event of an equal division of votes on any matter before the Board, the Chairman shall have the casting vote.

Section 7. Rules for regulating meetings and proceedings.

Subject to this Act, the Board may make rules for regulating its meetings and proceedings, and those of committees appointed under section 9.

Section 8. Functions of the Board.

The Board shall, in addition to any other functions assigned to it under this Act, have the following functions:

- (a) to advise the Minister and the Government of Malaysia on matters relating to this Act and developments pertaining thereto with particular reference to the implications of such developments for Malaysia;
- (b) to exercise control and supervision over the production, application and use of atomic energy and matters incidental thereto;
- (c) to establish, maintain and develop scientific and technical co-operation with such other bodies, institutions or organizations in relation to nuclear matters or atomic energy as the Board thinks fit for the purposes of this Act;
- (d) where so directed by the Government of Malaysia, to perform or provide for the performance of the obligations arising from agreements, conventions or treaties relating to nuclear matters or atomic energy to which Malaysia is a party where such agreements, conventions or treaties relate to the purposes of this Act; and
- (e) to do such other things arising out of or consequential to the functions of the Board under this Act which are not inconsistent with the purposes of this Act, whether or not directed by the Minister.

Section 9. Committees of the Board.

- (1) The Board may from time to time appoint such committees as it considers necessary or expedient to assist it in the performance of its functions under this Act.
- (2) Subject to this Act and any rules made under section 7, such committees may regulate their own procedure.
- (3) The members of such committees may be paid such allowances and other expenses in connection with the work of the committees as the Minister may from time to time determine with the concurrence of the Minister of Finance.

Section 10. Power to charge, receive and recover fees.

- (1) The Board shall have the power to charge and receive fees and, through the Government of Malaysia, recover fees for any services rendered by the Board.
- (2) The power under subsection (1) shall be without prejudice to the power of the Minister under paragraph 68(2) (m).

Section 11. Power of the Minister to issue directions.

The Minister may from time to time give the Board directions not inconsistent with this Act as to the policy to be followed in the performance of the functions and the exercise of the powers of the Board and the Board shall give effect to such directions.

PART III - CONTROL AND LICENSING

Section 12. Licensing of nuclear installation and of activities.

- (1) Without prejudice to the requirements of any other law, no person shall-
 - (a) site, construct or operate a nuclear installation;
- (b) deal in, possess or dispose of any radioactive material, nuclear material, prescribed substance or irradiating apparatus, unless he is the holder of a valid licence issued under subsection 16(5) by the appropriate authority for such purpose and as specified in the licence.
- (2) Subsection (1) shall not apply in respect of-
 - (a) any radioactive material, nuclear material, prescribed substance or irradiating apparatus carried as part of the stores or equipment of any ship or aircraft; and in the event of doubt whether such radioactive material, nuclear material, prescribed substance or irradiating apparatus is so carried, a certificate issued by the Board stating that such radioactive material, nuclear material, prescribed substance or irradiating apparatus is or is not part of such stores or equipment shall be final and conclusive; or
 - (b) any person acting lawfully under the supervision or instruction of a person in possession of a valid licence issued under this Act.
- (3) A licence for using any radioactive material, nuclear material, prescribed substance or irradiating apparatus for diagnostic or therapeutic purposes may be issued only to a registered medical practitioner, registered veterinary surgeon, radiologist, radiotherapist or registered dentist.

Section 13. Classification of licences.

- (1) The Minister may make regulations under paragraph 68(2)(c) for the classification of licences issued under this Act.
- (2) No person shall use any radioactive material, nuclear material, prescribed substance or irradiating apparatus for any purpose other than that specified in the licence issued to him in respect of that radioactive material, nuclear material, prescribed substance or irradiating apparatus.

Section 14. Exclusion of activity of prospecting or mining and requirement for reporting.

- (1) For the avoidance of doubt, the expressions "producing" and "production" in this Act in relation to any radioactive material, nuclear material or prescribed substance shall not include either of the activities of prospecting or mining for any radioactive material, nuclear material or prescribed substance. These activities shall be governed by the relevant laws relating to mining.
- (2) Any person who, in carrying out either of the activities of prospecting or mining or both, encounters, discovers or comes into possession of any radioactive material, nuclear material or prescribed substance shall immediately report such fact to the Board in writing and shall comply

with all directions that the Board may give in the matter, being directions not inconsistent with the relevant laws relating to mining.

Section 15. Licensing authority.

- (1) Subject to this section, the licensing authority under this Act shall be the Board.
- (2) The Board shall grant a general licence to the Director-General of Health to issue separate licences on behalf of the Board to any person applying for a licence to undertake any of the activities referred to in the classification of licences under this Act where such activities are in respect of medical purposes.
- (3) The Director-General of Health shall process the application in the same manner as is provided under this Act for the processing of a licence issued by the Board and any reference hereinafter to the expression "licence" shall, unless the context otherwise requires, mean a licence issued by the appropriate authority, being the Director-General of Health or the Board, as the case may be.

Section 16. Application for licence.

- (1) An applicant for a licence under this Act shall first make an application in that behalf to the Board.
- (2) Upon such application being made, the Board shall determine if the activity to be licensed is in respect of a medical purpose or a purpose other than a medical purpose.
- (3) If the Board determines that the activity to be licensed is in respect of a medical purpose, the Board shall refer the application to the Director-General of Health for the Director-General of Health to consider the application.
- (4) If the Board determines that the activity to be licensed is in respect of a purpose other than a medical purpose, the Board shall proceed to deal with the application.
- (5) The appropriate authority may thereafter issue to the applicant a licence in the prescribed form upon payment of the prescribed fee or may, if it thinks fit, refuse to issue such licence.
- (6) Every licence issued under this Act shall, unless sooner cancelled or suspended, continue in force for such period not exceeding three years as the appropriate authority may in each case determine.

Section 17. Conditions in licences.

- (1) Licences issued under this Act shall be subject to such conditions as may, be imposed by the appropriate authority which may in respect of the conditions imposed by it, add to, vary or revoke such conditions at any time.
- (2) Without prejudice to subsection (1), a licence referred to in the classification of the licences may be restricted to radioactive materials, nuclear materials or prescribed substances of a specified kind or kinds, or may be restricted to specified diagnostic or therapeutic purposes, which are limited in their type and nature; and a licence issued in respect of an irradiating apparatus may be restricted to a specified kind or kinds of such apparatuses, or may be restricted to specified diagnostic or therapeutic purposes, which are limited in their type and nature.

Section 18. Security for licences.

- (1) The appropriate authority may require that before any licence is issued under this Act, such security as it may specify shall be furnished for the due observance of the conditions of the licence.
- (2) Without prejudice to the other provisions of this Act, where there is any breach of any of the conditions of the licence, such security or part thereof as the appropriate authority may determine shall be forfeited to the Government of Malaysia.

Section 19. Registers.

- (1) The appropriate authority shall keep and maintain such registers as may be prescribed for the purposes of this Act.
- (2) The contents of every such register may be proved in any proceeding without production of the register by a certificate under the hand of the appropriate authority and every such certificate shall be *prima facie* proof of the matters stated therein.

Section 20. Returns.

- (1) Every licensee who has in his possession or under his control any radioactive material, nuclear material, prescribed substance or irradiating apparatus shall make a return of such radioactive material, nuclear material, prescribed substance or irradiating apparatus to the appropriate authority as may be prescribed.
- (2) Every such return shall specify the quantity and the type of radioactive material, nuclear material, prescribed substance or irradiating apparatus in the possession of or under the control of the licensee together with such other particulars as the appropriate authority may from time to time require.

Section 21. Return of every sale of radioactive material, etc.

- (1) A return of every sale of any radioactive material, nuclear material, prescribed substance or irradiating apparatus shall be submitted to the Board by the person selling the radioactive material, nuclear material, prescribed substance or irradiating apparatus within two weeks of the sale and such return shall contain the authenticated name and address of the person to whom the radioactive material, nuclear material, prescribed substance or irradiating apparatus is sold, in addition to any other particulars that the Board may require.
- (2) Where the radioactive material, nuclear material, prescribed substance or irradiating apparatus is sold in respect of a medical purpose, the Board shall forward a copy of the return to the Director-General of Health.

PART IV - CANCELLATION, SUSPENSION AND RENEWAL OF LICENCES

Section 22. Cancellation or suspension of licence.

- (1) The appropriate authority may at any time under any of the following circumstances in its discretion cancel, or suspend for such period as it may think fit, any licence issued under this Act-
 - (a) where the licensee has committed an offence under this Act;
 - (b) where the licensee has committed a breach of any of the conditions of the licence;
 - (c) where the licensee ceases to work or operate the nuclear installation in respect of which the licence was issued; or
 - (d) where in the opinion of the appropriate authority it would be in the public interest so to
- (2) Where a licence has been cancelled or suspended, the appropriate authority may at the time of such cancellation or suspension, or from time to time thereafter during the remainder of the period for which if it were not for the cancellation or suspension the licence would have been valid, give the licensee such directions as it may deem necessary in the public interest and the licensee shall comply with all such directions.
- (3) The licensee shall not have any claim whatsoever or be entitled to compensation for any loss caused to him by the cancellation or suspension of a licence issued under this Act or by the refusal to renew such licence.

Section 23. Renewal of licence.

- (1) A licence issued under this Act may from time to time be renewed.
- (2) An application to renew a licence shall be made to the appropriate authority in such manner as may be prescribed.
- (3) The appropriate authority may on such application renew the licence or may, if it thinks it fit so to do, refuse to renew the licence.

Section 24. Licensee to obtain prior approval of appropriate authority for change of address.

Every licensee shall obtain the prior approval of the appropriate authority in respect of any change of address of the premises specified in the licence.

PART IV - HEALTH AND SAFETY

Section 25. Protection of workers.

- (1) Every licensee shall comply with all such directives as the appropriate authority may issue from time to time for the protection of the health and for the safety of workers and all other persons from ionizing radiation, including directives in respect of matters pertaining to-
 - (a) conditions of exposure;
 - (b) dose limitation;

- (c) occupational exposure;
- (d) medical exposure;
- (e) exposure of members of the public and persons other than workers, excluding medical exposure;
- (f) accidental exposure:
- (g) emergency exposure; and
- (h) exposure other than any of those specified in paragraphs (a) to (g).
- (2) If the appropriate authority has reasonable cause to believe that any worker has been or is likely to be exposed to ionizing radiation, the appropriate authority may require the licensee-
 - (a) to provide and require such worker to wear approved personnel-monitoring devices;
 - (b) to keep records of dose and type of ionizing radiation to which such worker has been or is likely to be exposed;
 - (c) to install or use monitoring devices in work places to record the amount of ionizing radiation present and to keep records thereof; and
 - (d) to provide medical examination for such worker by an approved registered medical practitioner at such intervals as the appropriate authority may determine.
- (3) The appropriate authority may in its discretion require the licensee to provide at such intervals as it may determine medical examination by an approved registered medical practitioner for all or any of the workers of the licensee who are exposed or are likely to be exposed to ionizing radiation.
- (4) Any registered medical practitioner performing a medical examination under paragraph (2)(d) or subsection (3) shall inform the appropriate authority in the prescribed form of every worker whose health is or is reasonably suspected to be affected by ionizing radiation.
- (5) For the purposes of this section, "worker" includes any person working under the instruction of the licensee, whether or not employed by the licensee, in the handling or use of, or who will come into contact with, any radioactive material, nuclear material, prescribed substance or irradiating apparatus.
- (6) The Minister may prescribe the basic safety standards for the protection of workers and all other persons against ionizing radiation.

PART VI - DISPOSAL OF RADIOACTIVE WASTE

Section 26. Control of disposal of radioactive waste.

(1) No person shall dispose of or cause to be disposed any radioactive waste without the prior

authorization in writing of the appropriate authority.

(2) Any authorization given under this section may be subject to such conditions as the appropriate authority may impose.

Section 27. Control of accumulation of radioactive waste.

- (1) No person shall accumulate or cause to be accumulated any radioactive waste on any premises without the prior authorization in writing of the appropriate authority.
- (2) Any authorization given under this section may be subject to such conditions as the appropriate authority may impose.
- (3) Where the disposal of any radioactive waste has been authorized under section 26 and in accordance with that authorization the waste is required or permitted to be accumulated with a view to subsequent disposal thereof, no further authorization under this section shall be necessary to enable the waste to be accumulated or caused to be accumulated in accordance with the authorization given under section 26.
- (4) For the purposes of this section, where any radioactive material, nuclear material or prescribed substance is produced, kept or used in or on any premises and any substance arising from the production, keeping or use of that radioactive material, nuclear material or prescribed substance is accumulated in any part of the premises appropriated for the purpose and is retained there for a period of not less than three months, that substance arising from such production, keeping or use shall, unless the contrary is proved, be presumed-
 - (a) to be radioactive waste; and
 - (b) to be accumulated on the premises with a view to subsequent disposal thereof.

Section 28. Appropriate authority may direct licensee to rectify situation where facilities not adequate.

If it appears to the appropriate authority that adequate facilities are not available for the safe accumulation, storage or disposal of any radioactive waste, the appropriate authority may direct the licensee to rectify the situation and the licensee shall give effect to such direction.

Section 29. Appropriate authority may order licensee or other person to adopt measures to protect life, health and property.

Where any situation or condition endangering life, health, property or the environment is found to exist in or on any premises, nuclear installation, conveyance or site, the appropriate authority may direct the licensee or any other person, who in its opinion is responsible for such premises, nuclear installation, conveyance or site, to adopt such measures as would eliminate or protect against such situation or condition.

Section 30. Transport of radioactive waste with prior authorization of appropriate authority.

(1) No person shall transport any radioactive waste without the prior authorization in writing of the appropriate authority.

(2) Any authorization given by the appropriate authority under this section may be subject to such conditions as the appropriate authority may think necessary to impose for the protection of the public.

Section 31. Discretion to consult Director-General of Environmental Quality.

In the performance of its functions under this Part, the appropriate authority may, if it thinks it fit so to do, consult the Director-General of Environmental Quality appointed under subsection 3(1) of the Environmental Quality Act 1974 on any matter under this Part.

PART VII - APPEALS

Section 32. Appeals.

- (1) Any person who is dissatisfied with any decision of the appropriate authority made under this Act may within thirty days after being notified of such decision give notice of appeal in writing to the Minister in the prescribed manner.
- (2) The Minister shall as soon as is practicable cause to be served on the appellant a written notice specifying the date, time and place at which the appeal is to be heard:

Provided that the date so specified shall in no case be earlier than thirty days from the date of service of such notice.

- (3) The grounds of appeal shall be submitted to the Minister not less than ten days before the date fixed for the hearing of the appeal.
- (4) At the hearing of the appeal the appellant may be present either in person or by counsel and the Minister may call for such evidence as he thinks fit.
- (5) The Minister may, after hearing the appeal, make an order confirming or setting aside the decision of the appropriate authority or make such other order as he thinks fit, and the order of the Minister shall be final and shall not be subject to any appeal or review in any court.
- (6) All parties concerned shall give effect to the decision of the Minister in the matter.

PART VIII - POWERS OF SEIZURE AND ARREST, OFFENCES AND FORFEITURE

Section 33. Search warrant.

(1) Whenever it appears to any Magistrate, upon written information on oath and after such inquiry as he deems necessary, that there is reasonable ground to believe that in or on any premises, site, nuclear installation or conveyance there is concealed, kept, deposited or stored any radioactive material, nuclear material, prescribed substance or irradiating apparatus in

respect of which an offence has been committed under this Act, or any book or document directly or indirectly relating to or connected with any dealing in any radioactive material, nuclear material, prescribed substance or irradiating apparatus which was, or any intended dealing of the same which would be, an offence under this Act, that Magistrate may issue a warrant authorizing any named senior public officer, by day or night and with or without assistance-

- (a) to enter the premises, site, nuclear installation or conveyance and there to search for and seize such radioactive material, nuclear material, prescribed substance, irradiating apparatus, book or document;
- (b) to arrest any person being in or on the premises, site, nuclear installation or conveyance in whose possession or under whose control such radioactive material, nuclear material, prescribed substance, irradiating apparatus, book or document is found, or whom such officer reasonably believes to have been dealing in such radioactive material, nuclear material, prescribed substance or irradiating apparatus, or to have been in possession or control of such book or document or to have brought, received, concealed, kept, deposited or stored such radioactive material, nuclear material, prescribed substance, irradiating apparatus, book or document.
- (2) Such officer may if it is necessary so to do, with or without assistance-
 - (a) break open any door or window or part of the premises, site, nuclear installation or conveyance to have ingress thereinto;
 - (b) forcibly enter the premises, site, nuclear installation or conveyance and every part of it:
 - (c) remove by force any obstruction to entry, search, seizure and removal as he is empowered to effect; and
 - (d) detain every person found in or on the premises, site, nuclear installation or conveyance until the premises, site, nuclear installation or conveyance has been searched

Section 34. Circumstances for search without warrant.

- (1) Whenever it appears to any senior public officer that there is reasonable ground to believe that in or on any premises, site, nuclear installation or conveyance there is concealed, kept, deposited or stored, in contravention of this Act, any radioactive material, nuclear material, prescribed substance, irradiating apparatus, book or document as is described in subsection 33(1) and he has reasonable ground for believing that by reason of the delay in obtaining a search warrant the object of the search is likely to be frustrated, he may exercise in, upon and in respect of the premises, site, nuclear installation or conveyance all the powers mentioned in section 33 in as full and ample a manner or if he had been so empowered by warrant.
- (2) Any senior public officer may stop and search, and seize if necessary, any conveyance which he has reasonable ground for believing to be used for the carriage of any radioactive material, nuclear material, prescribed substance, irradiating apparatus, or any other thing liable to forfeiture under this Act.

Section 35. Right of entry, etc.

(1) Without prejudice to sections 33 and 34, any senior public officer shall, for the purposes of this Act, have the right to-

- (a) enter, inspect and search at all times any premises, site, nuclear installation or conveyance in which such officer has reasonable ground to believe that there is stored or kept any radioactive material, nuclear material, prescribed substance or irradiating apparatus or there is being conducted any activity in respect of which a licence is required under this Act, for the purpose of examining, testing or calibrating that material, substance or irradiating apparatus, as the case may be; or
- (b) require the licensee or occupier of the premises, site or nuclear installation or the person in charge of the conveyance to provide such information or documents in the possession or control of such licensee, occupier or person relating to any activity in respect of which a licence is required under this Act as the officer may specify.
- (2) Any officer exercising powers under subsection (1) shall produce his letter of authorization or document of identification on demand.

Section 36. Taking of samples, etc.

Without prejudice to the other provisions of this Part, any senior public officer may, while in or on the premises, site, nuclear installation or conveyance referred to in this Part-

- (a) take, without payment, such samples of any material or substance which he believes to be radioactive material, nuclear material, prescribed substance or radioactive waste as are necessary for the examination and testing thereof; or
- (b) make copies of or extracts from any drawing, plan or document found therein and, for the purpose of making such copies or extracts, may remove any such drawing, plan or document after giving a signed receipt for the same and retain possession thereof for a period not exceeding fourteen days.

Section 37. Indemnity of Government of Malaysia, appropriate authority and public officer.

The Government of Malaysia, the appropriate authority or any public officer acting under this Act shall not be liable to indemnify any person who has suffered any damage to or loss of property resulting from any entry, search or seizure under this Act unless the damage or loss shall have been caused by the wilful neglect or wilful default of the appropriate authority or public officer.

Section 38. Forfeiture.

- (1) Any radioactive material, nuclear material, prescribed substance, irradiating apparatus or radioactive waste in respect of which an offence under this Act is committed, or any book, document or conveyance connected with such offence, is liable to forfeiture.
- (2) Anything ordered to be forfeited under this Act shall be disposed of in such manner as the appropriate authority may direct.

Section 39. Obstruction of inspection, search or investigation an offence.

Any person who-

- (a) refuses any senior public officer access to any premises, site, nuclear installation or conveyance which he is entitled to have under this Act;
- (b) assaults, obstructs, impedes or delays any senior public officer in effecting any entry

which he is entitled to effect under this Act, or in the execution of any duty imposed or power conferred under this Act;

- (c) fails to comply with any lawful demand or order of any senior public officer in the execution of any duty imposed or power conferred under this Act;
- (d) refuses or neglects to give to any senior public officer any information which may reasonably be required and which he has in his power to give;
- (e) furnishes to any senior public officer as true, information which he knows or has reason to believe to be false;
- (f) conceals or attempts to conceal or fails to produce any radioactive material, nuclear material, prescribed substance, irradiating apparatus, radioactive waste, book or document in relation to which there is reasonable ground for suspecting the commission of an offence under this Act;
- (g) escapes or attempts to escape from lawful custody after having been arrested for an offence under this Act;
- (h) rescues or attempts to rescue or causes to be rescued any person who has been duly arrested or anything which has been duly seized under this Act; or
- (i) before or after any seizure under this Act, breaks or destroys anything to prevent such seizure.

commits an offence under this Act and is, on conviction, liable to imprisonment for a term not exceeding five years or a fine not exceeding five thousand ringgit or to both.

Section 40. Offence.

- (1) Any person who contravenes any of the provisions of this Act commits an offence under this Act.
- (2) Any person who commits an offence under this Act is, on conviction, where no penalty is expressly provided therefor, liable to imprisonment for a term not exceeding ten years or a fine not exceeding one hundred thousand ringgit or both.
- (3) Where an offence under this Act is committed by a body corporate, every person who at the time of the commission of the offence was a director or officer of that body corporate commits that offence:

Provided that nothing in this subsection shall render any such person so liable if he proves that he exercised all due diligence and took all reasonable precautions to prevent the commission of such offence and that such offence was committed without his knowledge, consent and connivance.

(4) Any person who would have been liable under this Act to any penalty for anything done or omitted if such thing had been done or omitted by him personally, shall be liable to the same penalty if such thing had been done or omitted by his partner, agent or servant, unless he proves that he exercised all due diligence and took all reasonable precautions to prevent the doing or omission of such thing and that such thing was done or omitted without his knowledge, consent and connivance.

(5) Without prejudice to the provisions of the Criminal Procedure Code [*Act 593*], the prosecution of any offence committed under this Act may be conducted by the appropriate authority or any senior public officer authorized in writing generally or specially so to do by the appropriate authority.

Section 41. Secrecy.

Except for the purposes of this Act or of any proceedings under this Act, no person shall disclose any information obtained under this Act.

PART IX - LIABILITY FOR NUCLEAR DAMAGE

Section 42. Meaning of "installation operator" for purposes of Part.

For the purposes of this Part, "installation operator" means-

- (a) a person licensed under this Act by the appropriate authority as the operator of a nuclear installation; or
- (b) a person who but for the cancellation or suspension of a licence issued under this Act would be the holder of such a licence.

Section 43. Liability of installation operator.

- (1) The installation operator shall be liable for nuclear damage upon proof that such damage has been caused by a nuclear incident-
 - (a) in his nuclear installation; or
 - (b) involving nuclear material coming from or originating in his nuclear installation, and occurring-
 - (i) before liability with regard to the nuclear incident involving the nuclear material has been assumed, pursuant to the express terms of a contract in writing, by another installation operator; or
 - (ii) in the absence of such express terms, before another installation operator has taken charge of the nuclear material;

or

- (c) involving nuclear material sent to his nuclear installation, and occurring-
 - (i) after liability with regard to a nuclear incident involving the nuclear material has been assumed by him, pursuant to the express terms of a contract in writing, from another installation operator; or
 - (ii) in the absence of such express terms, after he has taken charge of the nuclear material:

Provided that if nuclear damage is caused by a nuclear incident occurring in a nuclear installation and involving nuclear material stored therein incidental to the carriage of such material, paragraph (a) shall not apply where another installation operator or any other person is solely liable as provided in paragraph (b) or (c).

- (2) The installation operator shall be liable for such nuclear damage upon proof that the damage has been caused by a nuclear incident involving nuclear material in the course of carriage-
 - (a) to his nuclear installation from a place outside Malaysia from the time that the conveyance in which the nuclear material is carried enters Malaysia; or
 - (b) from his nuclear installation to a place outside Malaysia up to the time that the conveyance in which the nuclear material is carried leaves Malaysia.
- (3) Subsection (2) shall not apply where-
 - (a) there is any bilateral or multilateral arrangement to the contrary between the Government of Malaysia and the government of the country from which or to which the nuclear material is carried; or
 - (b) there is any applicable provision in force to the contrary in an international convention to which the Government of Malaysia and the government of the country from which or to which the nuclear material is carried are parties;

and where there is such arrangement or convention the contrary in force, the liability of the installation operator and all other persons shall be determined in accordance therewith.

Section 44. Liability for nuclear damage from nuclear material in transit.

- (1) Where nuclear material is being carried through Malaysia in transit on its way to its intended destination outside Malaysia and a nuclear incident occurs in Malaysia, the person licensed to transport the nuclear material by the competent authority in the country from which the nuclear material is being carried out of shall be liable for any nuclear damage caused.
- (2) No person shall carry any nuclear material in transit through Malaysia to its intended destination outside Malaysia unless such person-
 - (a) furnishes such financial security as may be required by the Board; and
 - (b) furnishes proof to the satisfaction of the Board that he is authorized by the country from which the nuclear material is being carried out of so to do.

Section 45. Absolute and exclusive liability.

- (1) The liability of the installation operator for any nuclear damage shall be absolute.
- (2) Except as otherwise provided in this Part, no person other than the installation operator shall be liable for nuclear damage.

Section 46. Exceptions to liability.

(1) Notwithstanding any provision to the contrary in this Act, no person shall be liable for any nuclear damage caused by a nuclear incident directly due to an act of armed conflict, hostilities,

civil war, insurrection or a grave natural disaster of an exceptional character.

- (2) The installation operator shall not be liable under this Act for nuclear damage-
 - (a) to the nuclear installation itself or to any property on the site of that nuclear installation which is used or to be used in connection with that nuclear installation; or
 - (b) to the conveyance in which the nuclear material involved was carried at the time of the nuclear incident.

Section 47. Recourse action.

- (1) Where nuclear damage has been caused by a nuclear incident, the installation operator concerned shall have a right of recourse only-
 - (a) if there is such a right pursuant to the express terms of a contract in writing with another installation operator or any other person;
 - (b) if the nuclear incident results from an act or omission with intent to cause damage, against the person who has acted or omitted to act with such intent; or
 - (c) if the nuclear incident results from stolen nuclear material, against the person who stole or unlawfully received the nuclear material causing the incident.
- (2) The right of recourse of the installation operator concerned under this section shall not in any way affect his liability under section 45 to persons other than those referred to in this section.

Section 48. Governments to claim compensation for nuclear damage to environment.

Where there is any nuclear damage to the environment, a claim for compensation shall be made by the Government of Malaysia, the Government of a State in Malaysia or by both, as the case may be, according to whether the segment of the environment that is damaged is within the jurisdiction of the Government of Malaysia, of a State in Malaysia or of both.

Section 49. Gross negligence or intentional act of claimant.

If the installation operator proves that the nuclear damage resulted wholly or partly either from the gross negligence of the person suffering the damage or from an act or omission of such person with intent to cause damage, the court may relieve the installation operator from paying compensation in respect of the damage suffered by such person.

Section 50. Liability not affected by Act.

Nothing in this Act shall affect the liability outside this Act of the installation operator for nuclear damage for which, by virtue of paragraph 46(2)(b), he is not liable under this Act.

Section 51. Carrier of nuclear material or person handling radioactive waste designated as installation operator.

The appropriate authority may, subject to such terms and conditions as may be prescribed, designate a carrier of nuclear material or a person handling radioactive waste, at the request of the carrier or such person and with the consent of the installation operator concerned, as

installation operator in place of the installation operator concerned in respect of such nuclear material or radioactive waste respectively. Upon such designation such carrier or such person shall be considered as an installation operator for the purposes of this Part.

Section 52. Several installation operators liable.

- (1) Where nuclear damage engages the liability of more than one installation operator, all the installation operators involved shall, in so far as the damage attributable to each operator is not reasonably separable, be jointly and severally liable.
- (2) Where a nuclear incident occurs in the course of carriage within Malaysia of nuclear material, either in one and the same conveyance or, in the case of storage incidental to carriage, in one and the same nuclear installation, and causes nuclear damage which engages the liability of more than one installation operator, the total liability shall not exceed the amount established under section 59.
- (3) Subject to subsection 61(2), in neither of the cases referred to in subsections (1) and (2) shall the liability of any one installation operator exceed the amount established under section 59.

Section 53. Liability of single operator of several nuclear installations involved in one nuclear incident.

Subject to section 43, where several nuclear installations of one and the same installation operator are involved in one nuclear incident, such installation operator shall be liable in respect of each nuclear installation involved up to the amount established under section 59.

Section 54. Non-nuclear damage deemed nuclear damage.

Whenever both nuclear damage and damage other than nuclear damage have been caused by a nuclear incident or jointly by a nuclear incident and one or more other occurrences, such damage shall, to the extent that it is not reasonably separable from the nuclear damage, be deemed for the purposes of this Part to be nuclear damage caused by that nuclear incident. Where, however, damage is caused jointly by a nuclear incident for which provision is made under this Part and by an emission of ionizing radiation for which provision is not made under this Part, nothing in this Act shall limit or otherwise affect liability, either as regards any person suffering nuclear damage, or by way of recourse or contribution, or of any person who may be held liable in connection with that emission of ionizing radiation.

Section 55. Certificate to carrier.

- (1) The installation operator shall provide a carrier of nuclear material with a certificate issued by or on behalf of the insurer or other financial guarantor furnishing the financial security required under section 60.
- (2) The certificate shall state the name and address of the installation operator and the amount, type and duration of the financial security and these particulars shall not be disputed by the person for whom or on whose behalf the certificate was issued.
- (3) The certificate shall also indicate the nuclear material in respect of which the financial security applies and shall include a statement by the appropriate authority that the person designated is an installation operator within the meaning of this Part.

Section 56. Several nuclear installations on same site.

The appropriate authority may determine that several nuclear installations of one installation operator which are located at the same site shall be considered as a single nuclear installation for the purposes of this Part.

Section 57. Investigation of nuclear incidents.

- (1) Any nuclear incident involving the application of this Act shall be forthwith reported to the Board. The installation operator concerned shall provide the Board with all information which it requires with a view to evaluating the extent of nuclear damage involved.
- (2) The Board shall make an investigation of the cause and the extent of the nuclear damage of the nuclear incident, and to the extent that the Board deems it to be in the public interest, the Board's findings may be made available to the public and to the parties involved, for the purposes of this Part.

Section 58. Compulsory examination and treatment.

- (1) After the occurrence of a nuclear incident, the Board may adopt such measures as are appropriate to determine the persons who were or might have been exposed to ionizing radiation resulting from such nuclear incident.
- (2) Notwithstanding any law to the contrary and for the purposes of carrying into effect the measures referred to in subsection (1), the Board may-
 - (a) require any person suspected or likely to be affected by exposure to ionizing radiation to be medically examined by a competent authority or body appointed by the Minister;
 - (b) cause any such person to be removed to a hospital or other place specially designated for the treatment, detection or observation of any nuclear damage to such person, and to detain such person until he can be discharged without danger to himself or others; or
- (c) cause a post-mortem examination to be made on any corpse where the death is suspected to have been caused by a nuclear incident or exposure to ionizing radiation.

 3) Any person who refuses, fails or neglects to submit for examination, treatment, detection or
- (3) Any person who refuses, fails or neglects to submit for examination, treatment, detection or observation under this section or refuses or obstructs the post-mortem examination of a corpse under this section commits an offence and is, on conviction, liable to imprisonment for a term not exceeding one month or a fine not exceeding two hundred ringgit or both.

Section 59. Limit of liability.

- (1) Notwithstanding any law to the contrary but subject to this Part, the liability of an installation operator for nuclear damage under this Act shall be limited to an amount equivalent at the commencement of this Act to fifty million ringgit for any one nuclear incident.
- (2) The Board may, taking into account the size and nature of the nuclear installation, the extent of the damage involved or any other circumstances, prescribe a different limit of liability from that provided under subsection (1) but such different limit of liability shall in no event be less than an amount equivalent at the commencement of this Act to twelve million ringgit for any one nuclear incident.

(3) The amounts referred to in subsections (1) and (2) shall not include any interest or costs awarded by the court in actions for compensation for nuclear damage.

Section 60. Financial security.

- (1) No licence to operate a nuclear installation or to import or export nuclear material into or from Malaysia shall be issued under this Act by the appropriate authority to an installation operator or any other person unless the installation operator or other person secures and maintains insurance or other financial security covering his liability for nuclear damage under this Act.
- (2) The Board shall prescribe the type and terms of the insurance or other financial security which shall be secured and maintained by the installation operator or any other person, and such insurance or other financial security may include private insurance, private contractual indemnity, self-insurance or a combination thereof or other evidence of financial ability to pay compensation under this Act.
- (3) Notwithstanding any law to the contrary, no insurer or other financial guarantor may suspend, cancel or vary the type and terms of the insurance or other financial security provided under this section without giving notice in writing of at least two months to the Board of its intention so to do or, in so far as such insurance or other financial security relates to the carriage of nuclear material, during the period of the carriage in question.

Section 61. Government indemnity.

(1) The Government of Malaysia may, where it considers it necessary so to do, indemnify the installation operator liable and provide the necessary funds for the payment of claims for compensation for nuclear damage which have been established against the operator to the extent that the yield of insurance or other financial security is inadequate to satisfy such claims:

Provided that the indemnity so provided by the Government of Malaysia, together with the yield of insurance or other financial security, shall not in the aggregate exceed the maximum amount established under section 59 for any one nuclear incident.

- (2) Notwithstanding subsection (1), where it appears that claims for compensation for nuclear damage caused by a nuclear incident may exceed the limit of liability established under section 59, the Board shall furnish a report to the Minister with its recommendations for the appropriation of additional funds for the payment of claims for such compensation and the Minister shall cause the report to be laid forthwith before the Dewan Rakyat.
- (3) Upon such report being laid before it, the Dewan Rakyat may by resolution appropriate additional funds for such purpose if it considers it necessary in the interests of the nation that the limit of liability established under section 59 should be exceeded but not otherwise.

Section 62. Intervention in court proceedings.

When, after the occurrence of a nuclear incident, the Government of Malaysia intends to indemnify the installation operator pursuant to section 61, the court adjudicating any claim for compensation arising from the nuclear incident shall allow the Government of Malaysia to intervene in the proceedings at any time before final judgment.

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Section 63. Prescription of rights and actions.

- (1) Subject to subsection (2), rights to compensation under this Act shall cease after twenty years from the date of the nuclear incident.
- (2) Actions for compensation under this Act shall be barred unless brought within twenty years from the date on which the person suffering nuclear damage had knowledge or should reasonably have had knowledge of such damage:

Provided that-

- (a) any person who claims to have suffered nuclear damage and who has brought an action for compensation within the period applicable pursuant to this subsection may amend his claim to take into account any aggravation of the damage, even after the expiry of that period; and
- (b) final judgment has not been entered in the case.

Section 64. Prescription with respect to nuclear material stolen, lost, jettisoned or abandoned.

- (1) Where nuclear damage is caused by a nuclear incident involving nuclear material which had at any time been stolen, lost, jettisoned or abandoned, the period within which to bring actions for compensation pursuant to section 63 shall be computed from the date of that nuclear incident and not from the date such nuclear material had been stolen, lost, jettisoned or abandoned.
- (2) For the avoidance of doubt, the actions for compensation in the circumstances referred to in subsection (1) shall lie against the installation operator by virtue of section 45 but without prejudice, however, to his right of recourse under section 47, and any person against whom the installation operator has a right of recourse under section 47 shall not be entitled to bring any claim for compensation against the installation operator.

Section 65. When claims exceed maximum limit.

When it appears that the nuclear damage from a nuclear incident may exceed the limit of liability established under section 59, and upon application by the Government of Malaysia where it intends to act pursuant to section 61, the court having jurisdiction in the matter shall issue some such orders as may be necessary to assure the equitable distribution of compensation, including orders apportioning the payments to be made to claimants and orders permitting partial payment to be made before final determination of the total claims.

Section 66. Exclusions.

Without prejudice to rights of compensation under any other law, the Minister may, if he determines that the small extent of the risks involved so warrants, exclude any prescribed small quantities of any radioactive material, nuclear material, or prescribed substance from the application of this Part.

Section 67. Delegation of powers and duties.

(1) The Board may from time to time, subject to any special or general directions, delegate to any person or class of persons (whether by name or office) such of its powers and duties under this

Act as it may think fit.

(2) Any delegation made under this section may at any time be revoked or varied by the Board.

PART X - GENERAL

Section 68. Regulations.

- (1) The Minister may, for the purpose of carrying out the provisions of this Act, make regulations, including regulations-
 - (a) for controlling, supervising and licensing the production, application and use of atomic energy; and
 - (b) for regulating the production, import, export, transport, refining, possession, ownership, use, sale or disposal of or other dealing in any radioactive material, nuclear material, prescribed substance, irradiating apparatus or any other thing that in the opinion of the Minister may be used for the production, use or application of atomic energy.
- (2) Without prejudice to the generality of subsection (1), regulations may also be made for all or any of the following purposes-
 - (a) making provision to secure that any radioactive product or radioactive waste from any source whatsoever is accumulated or disposed of safely;
 - (b) prescribing the method of treatment or disposal of any conveyance, package or container that has been used to carry, hold or store any radioactive material, nuclear material, prescribed substance, irradiating apparatus or radioactive waste;
 - (c) prescribing the purposes for which any radioactive material, nuclear material, prescribed substance or irradiating apparatus may be used and providing for the classification of licences issued under this Act;
 - (d) prohibiting or restricting the use of any specified radioactive material, nuclear material or prescribed substance, or of any specified radioactive material, nuclear material or prescribed substance containing more than a specified concentration of any radioactive chemical element:
 - (e) prohibiting or restricting the use of any specified type of irradiating apparatus;
 - (f) requiring compliance with standards relating to measurement of ionizing radiation;
 - (g) regulating the issuance by registered medical practitioners of prescriptions containing any prescribed substance;
 - (h) regulating the dispensing and compounding by registered pharmacists of prescriptions containing any prescribed substance;
 - (i) providing for the making of returns in respect of any radioactive material, nuclear material, prescribed substance or irradiating apparatus and of the types and quantities of radioactive materials, nuclear materials, prescribed substances or irradiating apparatuses

held;

- (j) providing for the keeping by purchasers of radioactive materials, nuclear materials, prescribed substances or irradiating apparatuses of records specifying the purposes for which the radioactive materials, nuclear materials, prescribed substances or irradiating apparatuses are used, and for the inspection of these records, and for the making of returns of entries in these records;
- (k) providing for the keeping of records of all applications of ionizing radiation or prescribed substances for diagnostic or therapeutic purposes;
- (I) providing for the procedure and prescribing the forms for applications, licences, registers, notices and other documents required for the purposes of this Act;
- (m) prescribing fees in respect of any licence under this Act or for any matter in respect of which fees may be imposed under this Act;
- (n) providing for the regulation of appeals under Part VII; or
- (o) prescribing anything which may be required for the purposes of this Act.

Section 69. Exemptions.

- (1) The Minister may by order in the *Gazette*, subject to such conditions or restrictions as he may consider necessary or expedient to impose, exempt any person or class of persons from any or all of the provisions of this Act.
- (2) Any order made under this section shall be laid before both Houses of Parliament.

Section 70. Repeal of Radioactive Substances Act 1968.

The Radioactive Substances Act 1968 [Act 17 of 1968] is repealed:

Provided that any permit issued under that Act shall remain valid and be deemed to have been issued as a licence under this Act by the appropriate authority, depending upon whether the activity licensed is in respect of a medical purpose or a purpose other than a medical purpose as determined by the Board, and shall have effect for the period specified therein.

Section 71. Operation of Act.

This Act shall be in addition to, and not in derogation of, any other law relating to dangerous goods in force in any part of Malaysia.

LIST OF AMENDMENTS

Amending law Short title In force from

REGULATIONS

- Atomic Energy Licensing (Appeal) Regulations 1990 P.U.(A) 206/1990;
- Radiation Protection (Transport) Regulations 1989 P.U.(A) 456/1989;
- Radiation Protection (Basic Safety Standard) Regulations 1988 P.U.(A) 61/1988;
- Radiation Protection (Licensing) Regulations 1986 P.U.(A) 149/1986;
- Radiation Protection (Medical X-ray Diagnosis) Rules 1983 P.U.(A) 169/1983.