

RADIATION ORDINANCE**(Cap. 303)****Contents**

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SCHEDULE	RADIOACTIVE MINERALS	S-2

To control the import, export, possession and use of radioactive substances and irradiating apparatus and the prospecting and mining for radioactive minerals and for purposes connected therewith.

[6 September 1957]

1. Short title

This Ordinance may be cited as the Radiation Ordinance.

2. Interpretation

In this Ordinance, unless the context otherwise requires—

“Board” (管理局) means the Radiation Board established under section 3;

“inspector” (督察) means a person appointed under section 16(1) to be an inspector for the purposes of this Ordinance;

“ionizing radiation” (電離輻射) means electromagnetic radiation (that is to say, X-ray or gamma ray photons or quanta) or corpuscular radiation, (that is to say, alpha particles, beta particles, electrons, positrons, protons, neutrons or heavy particles) being electro-magnetic radiation or corpuscular radiation capable of producing ions and emitted from a radioactive substance or from a machine that is intended to produce ionizing radiations, or from a machine in which electrons are accelerated by a voltage of not less than 5 kilovolts; (*Added 6 of 1961 s. 2. Amended L.N. 410 of 1982*)

“irradiating apparatus” (輻照儀器) means an apparatus which—

(a) is intended to produce or emit ionizing radiation; or

(b) is capable of producing or emitting ionizing radiation at a dose rate exceeding 5 (μ Sv) per hour at a distance

of 5 cm from any accessible point of the surface of the apparatus; (*Replaced 46 of 1990 s. 2*)

“medical practitioner” (醫生) means a person for the time being registered or exempted from registration under the Medical Registration Ordinance (Cap. 161);

“mine” (開採、採礦) includes all operations for the intentional winning or obtaining of any radioactive mineral;

“prospect” (勘探) means to search for any radioactive mineral and includes such working as is reasonably necessary to enable the prospector to test the radioactive mineral bearing qualities of the area concerned;

“radioactive mineral” (放射性礦物) means any substance specified in the Schedule;

“radioactive substance” (放射性物質) means any substance which consists of or contains any radioactive chemical element whether natural or artificial and whose specific activity exceeds 75 becquerels of parent radioactive chemical element per gram of substance; (*Replaced 6 of 1961 s. 2. Amended L.N. 410 of 1982; L.N. 307 of 1998*)

“substance” (物質) means any natural or artificial substance, whether in solid or liquid form or in the form of gas or vapour, and includes any manufactured article or any article which has been subjected to any artificial treatment or process.

3. Constitution of Radiation Board

- (1) There is hereby established for the purposes of this Ordinance a Board to be known as the Radiation Board.
- (2) The Board shall consist of—
 - (a) the following ex officio members, namely—
 - (i) the Director of Health; (*Amended 76 of 1989*)

- (ii) the Commissioner for Labour, or a person nominated by him as his representative; (*Replaced 55 of 1970 s. 3*)
 - (iii) the Director-General of Trade and Industry, or a person nominated by him as his representative; and (*Replaced 55 of 1970 s. 3. Amended L.N. 206 of 1977; L.N. 294 of 1982; L.N. 292 of 1989; L.N. 173 of 2000*)
- (b) such persons not exceeding 10 in number as the Chief Executive may appoint. (*Amended 60 of 2000 s. 3*)
- (3) The term of a non-ex officio member is 3 years, or such lesser period as the Chief Executive may determine at the time of appointment, and the member is eligible for reappointment on the expiry of the term. (*Replaced 9 of 2002 s. 6*)
- (3A) A non-ex officio member may be removed by the Chief Executive at discretion. (*Added 9 of 2002 s. 6*)
- (3B) A non-ex officio member may resign by giving a notice in writing to the Chairman of the Board. (*Added 9 of 2002 s. 6*)
- (4) The Director of Health shall be ex officio Chairman of the Board. In the absence of the Chairman from any meeting of the Board, the members of the Board present shall appoint one of their number to be Chairman. (*Amended L.N. 76 of 1989*)
- (5) The Board shall meet at such places and times as the Chairman of the Board may appoint, and at any meeting 5 members shall form a quorum.
- (6) Every question before the Board shall be determined by a majority of the votes of the members present at the meeting of the Board.

- (7) The Chairman of the Board shall have a deliberative vote and, in the case of an equality of votes, shall also have a casting vote.
- (8) Except as expressly provided in this Ordinance, the Board may regulate its procedure and may make standing orders for that purpose. *(Amended 46 of 1990 s. 3)*
- (9) A secretary to the Board shall be appointed by the Chief Executive. *(Amended 60 of 2000 s. 3)*
- (10) In this section, “non-ex officio member” (非當然成員) means a member of the Board who is appointed under subsection (2)(b). *(Added 9 of 2002 s. 6)*

3A. Transaction of business by circulation of papers

- (1) The Board may transact its business by circulation of a paper to all members without a meeting.
- (2) Subject to subsection (4), a written resolution that is approved by a majority of the members is as valid and effectual as if it had been passed at a meeting of the Board by the votes of the members so approving.
- (3) A member may, by giving a notice in writing to the Chairman of the Board within such period as may be specified in the paper being circulated, request the Chairman to refer any item of business in the paper to the next meeting of the Board for determination.
- (4) Any approval under subsection (2) in respect of an item of business specified in the notice is void.

(Added 9 of 2002 s. 6)

4. Functions of the Board

The functions of the Board shall be—

- (a) to grant or refuse to grant licences under this Ordinance and to impose conditions on any licence so granted;
- (b) to cancel, suspend or renew licences issued under this Ordinance;
- (c) to exercise any power vested in the Board under this Ordinance;
- (d) to handle any other matter which under this Ordinance may or is to be referred to the Board and is referred to it.

5. Advisory, technical and medical committees

The Board may from time to time appoint such advisory, technical or medical committees as it thinks fit to advise on such matters within the scope of its functions as are referred thereto by the Board. Any person may be appointed to be a member of any such committee notwithstanding that he is not a member of the Board, but a member of the Board shall be the Chairman of any such committee.

(Amended 6 of 1961 s. 3)

6. Delegation of powers and functions

(Adaptation amendments retroactively made - see 60 of 2000 s. 3)

The Board may, with the consent of the Chief Executive, by notice in the Gazette, delegate to any public officer the exercise of any of the powers (or the performance of any of the duties) conferred (or imposed) upon the Board by sections 9, 10 and 12.

(Added 55 of 1970 s. 4. Amended 60 of 2000 s. 3)

7. Control of radioactive substances and irradiating apparatus

- (1) Subject to such exemptions as may be prescribed, no person shall, except under and in accordance with a licence issued under this Ordinance—

- (a) manufacture or otherwise produce; or
 - (b) sell or otherwise deal in or with; or
 - (c) have in his possession or use,
any radioactive substance or irradiating apparatus. (*Amended 26 of 1965 s. 2*)
- (2) Any person who contravenes any of the provisions of subsection (1) shall be guilty of an offence and shall be liable to a fine of \$50,000 and to imprisonment for 2 years. (*Amended 46 of 1990 s. 4*)
- (3) This section does not apply to a radioactive substance or irradiating apparatus in transit through Hong Kong in or on a vessel or aircraft so long as it remains in or on that vessel or aircraft. (*Replaced 46 of 1990 s. 5*)

8. Control of prospecting for and mining radioactive minerals

(Adaptation amendments retroactively made - see 60 of 2000 s. 3)

- (1) Notwithstanding anything contained in the Mining Ordinance (Cap. 285), no person shall prospect for or mine any radioactive mineral except under and in accordance with a licence issued under this Ordinance.
- (2) If any such mineral is discovered in the course of prospecting under a prospecting licence granted under either the Prospecting and Mining Ordinance 1906 (7 of 1906), or the Mining Ordinance (Cap. 285), the holder of such licence shall immediately notify the Chief Secretary for Administration of such discovery. (*Amended L.N. 362 of 1997*)
- (3) If any such mineral is discovered in the course of mining under a mining licence or mining lease granted under either the Prospecting and Mining Ordinance 1906 (7 of 1906), or the Mining Ordinance (Cap. 285), no such mineral shall be removed without the consent of the Chief Executive. (*Amended 60 of 2000 s. 3*)

- (4) Any person who contravenes any of the provisions of this section shall be guilty of an offence and shall be liable to a fine of \$50,000 and to imprisonment for 2 years. (*Amended 46 of 1990 s. 4*)

9. Grant, etc. of licences

- (1) On application in the prescribed manner by any person desiring to obtain a licence under this Ordinance, or to renew a licence issued under this Ordinance, the Board may grant or refuse to grant a licence to the applicant or renew or refuse to renew the licence issued under this Ordinance, as the case may be.
- (2) Every application for a licence under this Ordinance or for renewal of a licence issued under this Ordinance shall be accompanied by such information or particulars as may be prescribed or as the Board may require. (*Amended 55 of 1970 s. 5*)
- (3) Every licence granted or renewed under subsection (1) shall, on payment of such fee as may be prescribed, be issued or renewed in the prescribed manner and in the appropriate prescribed form, and shall be valid, unless cancelled or suspended, for such period as the Board may determine. (*Amended 55 of 1970 s. 5*)

10. Cancellation and suspension of licences

- (1) By notice in writing to the holder of a licence issued under this Ordinance, the Board may cancel, or for such period as it thinks fit, suspend, the licence, if the Board is satisfied that—
- (a) the holder thereof or any servant or agent of such holder has been convicted of an offence against this Ordinance; or (*Amended 46 of 1990 s. 6*)

- (b) the holder thereof or any servant or agent of such holder has committed a breach of any of the terms or conditions of the licence; or
 - (c) for any other reason, it is in the public interest so to do.
- (2) Where any licence is cancelled or suspended under subsection (1), neither the licence fee nor any part thereof shall be returned unless the Board so directs.

11. Appeal

(Adaptation amendments retroactively made - see 60 of 2000 s. 3)

- (1) An appeal by an applicant for or holder of a licence under this Ordinance shall lie by way of petition to the Chief Executive from any refusal to grant or renew or from any cancellation or suspension of a licence under section 9 or 10 within one month of notice being given of such refusal, cancellation or suspension.
- (2) On consideration of the petition, the Chief Executive may make such order as he thinks proper and such order shall be final.

(Amended 60 of 2000 s. 3)

12. Conditions of licences

- (1) Any licence granted under section 9(1) shall be subject to such conditions as the Board may see fit to impose, and any conditions so imposed may at any time be varied, added to or revoked by the Board. *(Amended 55 of 1970 s. 6)*
- (2) Without limiting the general powers conferred by subsection (1) any such condition may restrict the licence to—
- (a) radioactive substances of a specified kind or specified kinds;
 - (b) a specified apparatus or apparatus of a specified kind or specified kinds;

- (c) specified purposes.

13. Regulations

- (1) The Board may, subject to the approval of the Legislative Council, by regulation prescribe or provide for—
 - (a) precautions to be taken to prevent injury being caused by ionizing radiations to the health of persons employed in places where radioactive substances are manufactured, produced, treated, stored, or used, or where irradiating apparatus is used, or of other persons likely to be exposed to harmful radiation;
 - (b) methods of disposing of radioactive waste products from any source whatever;
 - (c) the structural requirements of buildings where any radioactive substance is manufactured, produced, treated, used, or stored, or where irradiating apparatus is used;
 - (d) precautions to be taken to prevent injury being caused by the transport of radioactive substances to the health of persons engaged therein and other persons;
 - (e) the method of packing any radioactive substance;
 - (f) marks to be placed on vessels, vehicles or containers containing any radioactive substance;
 - (g) the method of treatment or disposal of any package, container or vessel that has been used to convey, hold, or store any radioactive substance;
 - (h) the manner in which and the conditions subject to which radioactive substances may be stored or used;
 - (i) the purposes for which any radioactive substance or irradiating apparatus may be used;

- (j) the use of any specified radioactive substance containing more than a specified concentration or amount of any radioactive chemical element;
- (k) the use of any specified type of irradiating apparatus;
- (l) the maximum working hours of persons employed in the mining, manufacture, production, treatment, storage or use of radioactive substances or the use of irradiating apparatus, regulating the employment of those persons, the minimum holidays to be taken by those persons, and the medical examination of those persons;
- (m) the issue by medical practitioners of prescriptions containing any radioactive substance;
- (n) the dispensing and compounding of any prescription containing any radioactive substance;
- (o) the making of returns by owners and persons in possession of radioactive substances of the quantities and classes of radioactive substances held by them;
- (p) the keeping by purchasers of radioactive substances of records specifying the purposes to which those substances are put, and the inspection of those records, and for the making of returns of entries in those records;
- (q) the keeping of records of all applications of X-rays or radioactive substances for any specified purpose;
- (r) the forms of applications, licences, notices and other documents required for the purposes of this Ordinance, or authorizing the Board to prescribe such forms;
(Amended 46 of 1990 s. 7)
- (s) the fees payable in respect of any licence under this Ordinance;
- (t) the classification of licences for the purposes of this Ordinance;

- (u) the exemption of any class of persons or of any substance, article or apparatus from the operation of any or all of the provisions of this Ordinance; (*Amended 46 of 1990 s. 7*)
 - (v) such matters as are required or permitted to be prescribed under this Ordinance;
 - (w) the better carrying out of the provisions of this Ordinance.
- (2) Regulations made under this section may provide that contravention of specified provisions of such regulations shall be an offence and may provide penalties therefor:
- Provided that no penalty so provided shall exceed a fine of \$50,000 and imprisonment for 2 years. (*Amended 46 of 1990 s. 4*)

14. Recommendations for protection from radiation hazards

- (1) The Board may from time to time issue free of charge in such manner as it thinks fit recommendations for protection from radiation hazards for the guidance of licensees and persons engaged in radiation work.
- (2) Failure on the part of any person to observe the provisions of any such recommendations shall not of itself render that person liable to criminal proceedings of any kind, but any such failure may in any proceedings under this Ordinance be relied upon by any party to the proceedings as tending to establish or to negative any liability which is in question in those proceedings.

(Added 6 of 1961 s. 4)

15. Power to exempt from provisions of Ordinance or regulations

- (1) The Board may grant, subject to such conditions or restrictions as it may consider expedient, exemption from

any of the provisions of this Ordinance to any specified person, group or class of persons or in respect of a specified radioactive substance or irradiating apparatus or class thereof where, having regard to the public interest to be served and the degree of risk, if any, to human health involved by the granting of such exemption, the Board is of opinion that it is expedient and safe so to do.

- (2) A notice in writing signed by the Chairman of the Board of any exemption granted to any specified person, group or class of persons in accordance with subsection (1) shall be issued to the person, group or class of persons to which such exemption applies:

Provided that in the case of a group or class of persons such notice may be issued by means of a notification in the Gazette.

- (3) A notice in writing signed by the Chairman of the Board of an exemption granted in respect of a specified radioactive substance or irradiating apparatus or a class thereof shall be published in the Gazette. (*Added 46 of 1990 s. 8*)

(Added 6 of 1961 s. 4. Amended 46 of 1990 s. 8)

16. Appointment and powers of inspectors

- (1) The Board may from time to time appoint persons by name or office to be inspectors for the purposes of this Ordinance.
- (2) Any inspector may, on producing, if so required, a duly authenticated document showing his authority, enter and inspect at all reasonable hours any premises, vehicle, vessel or aircraft in which there is any radioactive substance or irradiating apparatus in respect of which a licence is for the time being in force under this Ordinance or in respect of which a licence under this Ordinance is not required by virtue

of section 7(3) or any exemption made by regulation under section 13. (*Amended 46 of 1990 s. 9*)

- (3) If a magistrate is satisfied from information on oath of any inspector that—
- (a) entry into any premises, vehicle, vessel or aircraft in exercise of the powers conferred by subsection (2) has been refused; or
 - (b) there are reasonable grounds for suspecting that an offence against this Ordinance has been or is being committed in or in connection with any premises, vehicle, vessel or aircraft, (*Amended 46 of 1990 s. 9*)

the magistrate may, by warrant under his hand, authorize any person named in the warrant together with any police officer, to enter and search such premises, vehicle, vessel or aircraft, if necessary by force.

- (4) In the exercise of the powers of entry and inspection under subsection (2) or of entry and search under a warrant granted under subsection (3), any inspector may—
- (a) take without payment such samples of any substance which he believes to be a radioactive substance as are necessary for the examination and testing thereof;
 - (b) examine and calibrate any irradiating apparatus or any apparatus which he believes to be an irradiating apparatus;
 - (c) seize, remove and detain anything with respect to which he may have reasonable grounds for suspecting that any offence against this Ordinance has been committed. (*Amended 46 of 1990 s. 9*)
- (5) Where it is not practicable to remove an irradiating apparatus pursuant to subsection (4)(c) an inspector may—

- (a) if it is possible to do so without causing permanent damage to the irradiating apparatus, render it inoperable; or
 - (b) seal the apparatus so as to prevent the use of the apparatus without breaking the seal. (*Added 46 of 1990 s. 9*)
- (6) Where it is not practicable to remove a radioactive substance pursuant to subsection (4)(c) an inspector may seal an article or place so as to prevent the use of the radioactive substance without breaking the seal. (*Added 46 of 1990 s. 9*)

17. Obstruction, breaking of seals

A person who obstructs, whether actively or passively, a person in the execution of a power conferred by or under section 16 or who breaks or interferes with a seal affixed under section 16 commits an offence and is liable to a fine of \$10,000 and to imprisonment for 6 months.

(Replaced 46 of 1990 s. 10)

18. False statements

Any person who, for the purpose of obtaining, whether for himself or any other person, the grant of any licence under this Ordinance, or for any other purpose in relation to this Ordinance, makes any declaration or statement which to his knowledge is false in any particular shall be guilty of an offence and shall be liable to a fine of \$25,000.

(Amended 46 of 1990 s. 11)

19. Disclosure of information

Any person who discloses any information obtained in the exercise of any powers conferred by this Ordinance, being information with regard to any manufacturing process or trade secret, unless

the disclosure was made in accordance with the directions of the Board or for the purpose of proceedings for an offence against this Ordinance, shall be guilty of an offence and shall be liable to a fine of \$25,000.

(Amended 46 of 1990 s. 12)

20. Continuing offences

Any person guilty of an offence against this Ordinance shall, in addition to any other penalty prescribed for such offence, be liable to a fine of \$2,500 for every day during the whole or any part of which such offence is knowingly and wilfully continued.

(Amended 46 of 1990 s. 13)

21. Forfeiture

(Adaptation amendments retroactively made - see 60 of 2000 s. 3)

(1) A magistrate may order to be forfeited to the Government any radioactive substance or irradiating apparatus in respect of which an offence against this Ordinance has been committed, whether any person has been charged with such offence or not. *(Amended 46 of 1990 s. 14; 60 of 2000 s. 3)*

(2) Any radioactive substance or irradiating apparatus forfeited under subsection (1) shall be sold or otherwise disposed of in such manner as the Board directs.

22. Liability of licensees

(1) Where it is proved to the satisfaction of the court that an offence against this Ordinance has been committed in respect of a radioactive substance or irradiating apparatus, a person holding a licence issued under this Ordinance in respect thereof shall be held to be liable for the offence and to the penalty provided for it, unless he proves that the offence was committed without his knowledge and that he had exercised all due diligence to prevent the commission of the offence.

- (2) This section does not exempt the person who committed the offence from the penalty for the offence.

(Replaced 46 of 1990 s. 15)

23. Liability of directors, etc., where offence committed by company

Where a person by whom an offence under this Ordinance has been committed is a company, every director and every officer concerned in the management of the company shall be guilty of the like offence unless he proves that the act constituting the offence took place without his knowledge or consent.

(Added 6 of 1961 s. 5)

24. Amendment of Schedule

Subject to the approval of the Legislative Council, the Board may by order amend the Schedule.

25. Saving for other enactments

The provisions of this Ordinance shall be in addition to and not in derogation of the provisions of any other enactment relating to radioactive substances or irradiating apparatus.

(Amended 46 of 1990 s. 16)

SCHEDULE

[ss. 2 & 24]

RADIOACTIVE MINERALS

- (1) Any mineral containing uranium or thorium or any compound thereof and, in particular and without prejudice to the generality of this paragraph, the substances hereinafter set out in this Schedule.
(Amended L.N. 76 of 1965)
- (2) Minerals of the pitchblende group, including pitchblende, uraninite, ulrichite, broggerite, cleveite and related mineral species.
- (3) Secondary uranium minerals including torbernite, autunite, uranite, rutherfordine, uranophane, gummite, thorogummite, uranocircite, kasolite, becquerelite, and other silicates, hydrates, carbonates, phosphates or arsenates of uranium.
- (4) Carnotite, tyuyamunite, and related uranium-bearing vanadate ores.
- (5) Uranium-bearing niobate-titanate-tantalate ores, including euxenite, polycrase, blomstrandine, priorite, samarskite, fergusonite, betafite and related minerals.
- (6) Monazite, thorite, and thorianite.