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GOVERNMENT REGULATION OF THE REPUBLIC OF INDONESIA
NUMBER 29 YEAR 2008
CONCERNING
LICENSING OF THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL

BY THE GRACE OF GOD ALMIGHTY

PRESIDENT OF THE REPUBLIC OF INDONESIA,

Considering :

a. whereas the use of ionizing radiation sources and nuclear materials necessary requirements and procedures stricter licensing, transparent, clear, firm, and fair to consider the risk of danger radiation, and security of radioactive sources and nuclear materials, which is able to ensure the safety of workers, members of the public, and environmental protection;

b. whereas the licensing requirements stipulated in Government Regulation No. 64 Year 2000 on Licensing Utilization of Nuclear Energy as the implementation of Article 17 of Law Number 10 Year 1997 on Nuclear Energy is no longer appropriate to the legal needs of the community, the international standard, and development of science and technology in the utilization of ionizing radiation sources and nuclear materials, so it needs to be replaced;

c. whereas based on the considerations set forth in points a and b need to stipulate Government Regulation on Licensing of the Utilization of Ionizing Radiation Sources and Nuclear Materials;

In View Of:

1. Article 5 paragraph (2) of the Constitution of the Republic of Indonesia Year 1945;

2. Law No. 10 Year 1997 on Nuclear Energy (State Gazette of the Republic of Indonesia 1997 No. 23, Supplement to State Gazette of the Republic of Indonesia Number 3676);

RESOLVED:

ENACTED : THE GOVERNMENT REGULATION CONCERNING LICENSING THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL.

SECTION I
GENERAL PROVISION
Article 1

In this Government Regulation what is meant by:

1. Utilization shall mean activities related to nuclear energy, including research, development, mining, manufacturing, production, transportation, storage, transfer, export, import, usage, decommissioning and radioactive waste management to improve the welfare of the people.
2. Nuclear Energy shall mean energy released in any form in the process of nuclei transformation, including energy derived from Ionizing Radiation Sources.
3. Ionizing radiation shall mean the source of radioactive substances and facilities, and generating ionizing radiation.
4. Radioactive source shall mean a solid radioactive substance which permanently encased in a capsule that is firmly attached.
5. Nuclear material shall mean substances that can produce the fission chain reaction or material that can be converted into a substance that can produce the fission chain reaction.
6. Safeguards shall mean any action that is intended to ensure that the objectives of Nuclear Material Utilization is only for peaceful purposes.
7. Radiation Protection Program shall mean a systematic and planned measure to protect workers, the public, and the environment from radiation hazards.

8. Closure shall mean the process of cessation of activity utilization of radioactive substances permanently.
9. Nuclear Energy Regulatory Agency, hereinafter referred as BAPETEN shall mean agency that duty to regulate through regulation, licensing, and inspection of all activities Utilization of Nuclear Energy.
10. Licensee shall mean a person or entity who has received a license from BAPETEN to utilize nuclear energy.
11. Inspection shall mean one of the elements of regulation on utilization of Ionizing Radiation Sources and Nuclear Material which carrying out by Inspector to ensure nuclear regulation obeyed/ followed by the licensee.

Article 2

This Government Regulation stipulate about:

a. Requirements and licensing procedures of the utilization of Ionizing Radiation Sources and Nuclear Material; and
b. Exemption from the obligation to have a license in the utilization of Ionizing Radiation Sources as referred to in points a.

CHAPETER II

CLASSIFICATION OF THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL

Article 3

(1) Classification of Ionizing Radiation Sources referred to in Article 2 point a are classified being 3 (three), which includes :
   a. Group A;
   b. Group B; and
   c. Group C.
(2) Utilization of Nuclear Material referred to Article 2 points a classified as Group A.

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Article 4

Utilization of Ionizing Radiation Sources referred to in Article 3 paragraph (1) points a include activities in:

a. export of radioactive substances ;
b. import and transfer of radioactive substances and/ or generating ionizing radiation for medical purposes ;
c. import of radioactive substances for other than medical purposes ;
d. transfer of radioactive substances and/ or generating ionizing radiation for medical purposes ;
e. transfer of radioactive substances and/ or ionizing radiation machine for non-medical purposes ;
f. production to ionizing radiation machines ;
g. production of consumer goods containing radioactive substances ;
h. usage and/ or research and development in :
    1. diagnostic and interventional radiology ;
    2. irradiators category I with a capsulated radioactive substance;
    3. Category I irradiators with ionizing radiation machine;
    4. the industrial gauging with high activity radioactive substances ;
    5. industrial radiography opened facility;
    6. well logging;
    7. tracer;
    8. photofluorography with medium activity radioactive substances or ionizing radiation with energy generation medium;
    9. radiotherapy;
    10. calibration facility;
    11. industrial radiography closed facility;
    12. photofluorography with high activity radioactive substances or ionizing radiation with energy generation high ;

13. irradiators category II and III with capsulated radioactive substances;
14. irradiators category II with generating ionizing radiation ;
15. irradiators category IV with capsulated radioactive substances;
16. in vivo diagnostic nuclear medicine; and
17. nuclear medicine therapy;

i. radioisotope production; and
j. radioactive waste management.

Article 5

Radioactive Waste management referred to in Article 4 point j shall be carried out as:

a. non-commercial by National Nuclear Energy Agency;
b. commercial by State company, cooperation and/ or private company which is cooperate with or designation by National Nuclear Energy Agency.

Article 6

Utilization of Nuclear Material referred to Article 3 paragraph (2) includes activities in:

a. research and development;
b. nuclear mineral mining;
c. manufacturing;
d. production;
e. storage;
f. transfer;
g. import and export; and
h. usage.

Article 7

Utilization of Ionizing Radiation Sources Group B referred to in Article 3 Paragraph (1) point b include activities in:

a. import, export, and/ or transfer of equipment containing radioactive substances for consumer goods;
b. storage of radioactive substances; and
c. use in:
    1. nuclear medicine diagnostic in-vitro;
    2. fluoroscopy luggage; and,
    3. industrial gauging with low activity radioactive substances or ionizing radiation generator with low energy.

Article 8

Utilization of Ionizing Radiation Sources Group C as referred to in Article 3 paragraph (1) point c include activities in:

a. export on ionizing radiation machine;
b. import on ionizing radiation machine for medical purposes;
c. import generators besides ionizing radiation for medical purposes; and
d. usage in:
    1. opened or capsulated radioactive substances for educational purposes, research and development;
    2. Check-sources;
    3. radioactive substances for calibration;
    4. radioactive substances for standardization; and
    5. explosive detector.

Article 9

Further stipulation regarding the Utilization of Ionizing Radiation Resources and Nuclear Material as defined in Article 4, Article 6, Article 7 and Article 8 are regulated with BAPETEN Chairman Regulation.

CHAPETER III

LICENSING REQUIREMENTS

Section 1

General

Article 10

(1) Every person or entity that will perform Utilization of Ionizing Radiation Sources and Nuclear Material must have licensing from the BAPETEN Chairman.

(2) In certain cases based on Government Regulation, the obligations have license referred to in paragraph (1) can be excluded.

Article 11

The license referred to in Article 10 paragraph (1) must be obtained after the applicant meets the requirements of:

a. administrative requirements;

b. technical requirements; and/ or

c. specific requirements.

Section 2

Administrative Requirements

Article 12

Administrative requirements referred to in Article 11 paragraph consist of:

a. the applicant 's identity;

b. document of the establishment of incorporation or business entity;

c. license and/ or requirements provide by other authorized agencies in accordance with regulations; and

d. location of the utilization of Ionizing Radiation Sources and Nuclear Material.

Article 13

Administrative requirements referred to in Article 12 apply to the entire group of the utilization of Ionizing Radiation Sources and of Nuclear Material as referred to in Article 4, Article 6, Article 7, and Article 8.

Section 3

Technical Requirements

Article 14

(1) The technical requirements referred to in Article 11 points b shall consist of:
   a. operating procedures;
   b. technical specifications of Ionizing Radiation Sources and Nuclear Materials being used, in accordance with the standards of radiation safety;
   c. radiation protection equipment and/ or security equipment of Radioactive Sources;
   d. radiation protection and safety program and/ or security program of Radioactive Sources;
   e. verification report of radiation safety and/ or security of radioactive sources;
   f. radiation worker medical examination conducted by a doctor who has the competence, designated by license applicant, and approved by the competent authority in the field of human labor; and/ or
   g. personnel qualification data, which includes :
      1. radiation protection officers and other personnel who are competent;
      2. personnel who handling the Ionizing Radiation Sources; and/ or
      3. Radioactive Sources or Nuclear Materials security officer.

(2) Further stipulation regarding with the details of the technical requirements referred to in paragraph (1) is regulated with the BAPETEN Chairman Regulation.

Article 15

(1) All the technical requirements referred to in Article 14 paragraph (1) applies to utilization of Ionizing Radiation Sources and Nuclear Materials group A as referred to in Article 4 and Article 6.

(2) The technical requirements referred to in Article 14 paragraph (1) points a, b, c, d, f, and g figure 1 applies to utilization of Ionizing Radiation Resource Group B referred to in Article 7.

(3) The technical requirements referred to in Article 14 paragraph (1) points a, b, and g figure 2 applies to the utilization of Ionizing Radiation Resource Group C as referred to in Article 8.

Article 16

(1) For Nuclear Materials, in addition to fulfill the technical requirements referred to in Article 14, apply other technical requirements include :
   a. Safeguards system;
   b. Nuclear materials security system; and/ or
   c. Statement of the applicant that the export and import of nuclear materials is done with partners from the country:
      1. a party to the Treaty on the Non- Proliferation of Nuclear Weapons (Prevention of Spread of Nuclear Weapons Treaty); and
      2. has Safeguards Agreements with the International Atomic Energy Agency (IAEA).

(2) Further stipulation regarding with the details of the technical requirements referred to in paragraph (1) is regulated with BAPETEN Chairman Regulation.

Section 4

Special requirements

Article 17

(1) For Utilization of Ionizing Radiation Sources certain group A, in addition to fulfill the administrative requirements referred to in Article 12 and the technical requirements referred to in Article 14, special conditions apply.

(2) Utilization of Ionizing Radiation Sources A certain group referred to in paragraph (1) shall include :

a. usage and/ or research and development of Ionizing Radiation Sources referred to in Article 4 points h figure 9 to figure 17;

b. radioisotope production referred to in Article 4 points i; and

c. radioactive waste management as referred to in Article 4 points j.

(3) The specific requirements referred to in paragraph (1) shall apply to the following activities:

a. sitting;

b. construction;

c. commissioning;

d. operation; and/ or

e. closure.

Article 18

Specific requirements of the usage and/ or research and development of Ionizing Radiation Sources referred to in Article 17 paragraph (2) points a, for the following activities:

a. construction, include :

1. facility in accordance with the design standards of radiation safety and/ or security of radioactive sources , and

2. technical description of the construction documents .

b. operations, including:

1. Quality Assurance program operations; and/ or
2. documents regarding technical description of Ionizing Radiation Sources.

c. closure, including statements regarding the final condition of facilities.

Article 19

The specific requirements radioisotope production referred to in Article 17 paragraph (2) point b, for the following activities:

a. construction, include :

1. environmental feasibility decision of the agency responsible for the environment; and/ or
2. construction program.

d. commissioning, include:

1. commissioning program;
2. reports of the construction;
3. report on the implementation and management of environmental monitoring during construction;
4. manufacture and testing protocols; and / or
5. Quality Assurance Program radioisotope production facility commissioning.

e. operations , including :

1. report on the implementation of environmental management and monitoring during commissioning;
2. Quality Assurance Program radioisotope production facility operations;, and / or
3. report on the implementation of commissioning.

f. Closure, including statements regarding the final condition of the facility.

Article 20

(1) Specific requirements for radioactive waste management as referred to in Article 17 paragraph (2) points c, for the following activities:

a. sitting, include :
   1. site evaluation report ;
   2. main data facility; and
   3. implementation of the Quality Assurance Program recording site evaluation;

b. construction, include:
   1. environmental feasibility decision of the agency responsible for the environment; and
   2. construction program.

c.commissioning, include :
   1. reports of the construction;
   2. commissioning program; and
   3. Quality Assurance commissioning program for radioactive waste management facilities.

d. operations , including :
   1. report on the implementation of commissioning;
   2. report on the implementation and management of environmental monitoring during commissioning;
   3. Quality assurance program for radioactive waste management facility operations;
   4. radioactive waste package criteria are acceptable;
   5. preliminary closure plan;
   6. evidence of cooperation with or designation by the National Nuclear Energy Agency; and/ or
   7. proof of financial assurance for closure.

e. Closure, final closure plan covers.

(2) Evidence of cooperation with or designation by the National Nuclear Energy Agency, and proof of financial assurance referred to in paragraph

(1) points d figures 6 and 7 only applies to state-owned enterprises, cooperatives, and/ or private entities who cooperation with or designated by the National Nuclear Energy Agency referred to in Article 5 point b.

Article 21

Further stipulation regarding with the details of the technical requirements referred to in Article 18 through Article 20 is regulated with BAPETEN Chairman Regulation.

CHAPTER IV
PROCEDURES FOR APPLICATION AND LICENSE ISSUANCE

Section 1
Application for and Issuance of License

Article 22

(1) To obtain license of the Utilization of Ionizing Radiation Resource Group A referred to in Article 4 points a through h figure 1 through figure 8, Utilization of Nuclear Material licenses referred to in Article 6, the applicant must apply in writing to the BAPETEN Chairman by attaching the required documents :
   a. administrative referred to in Article 12; and
   b. technically referred to in Article 15 Paragraph (1) and Article 16 of Nuclear Materials.

(2) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman provide a statement about the documents no later than 3 (three) working days after the document is received.

(3) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(4) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(5) Assessment of license's requirements document referred to in paragraph (4) shall be a maximum of 15 (fifteen) working days from the date of the document declared complete clearance requirements.

(6) If the assessment indicates that the license's requirements document referred to in paragraph (5) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (5) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(8) The applicant must submit the license's requirements repair documents referred to in paragraph (7) not later than 15 (fifteen) working days after notice is given to the applicant.

(9) If the applicant does not submit the license's requirements repair documents referred to in paragraph (8), the applicant is considered canceled the license application.

(10) The assessment of the license's requirements repair documents referred to in paragraph (8) shall be a maximum of 15 (fifteen) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) If the assessment indicates that the license's requirements repair documents referred to in Paragraph (8) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 23

(1) To obtain licensing of the Ionizing Radiation Resource Utilization Group B referred to in Article 7, the applicant must apply in writing to the BAPETEN Chairman attach the required documents:

a. administrative referred to in Article 12; and

b. technically referred to in Article 15 paragraph (2).

(2) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman provide a statement about the documents no later than 3 (three) working days after the document is received.

(3) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(4) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(5) Assessment of license's requirements document referred to in paragraph (4) shall be a maximum of twelve (12) working days from the date of the document declared complete clearance requirements.

(6) If the assessment indicates that the license's requirements document referred to in paragraph (5) has met the requirements, BAPETEN Chairman, within a period of 5 (five) working days, issue a license.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (5) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(8) The applicant must submit the license's requirements repair documents referred to in paragraph (7) not later than twelve (12) working days after notice is given to the applicant.

(9) If the applicant does not submit the license's requirements repair documents referred to in paragraph (8), the applicant is considered canceled the license application.

Article 24

(1) To obtain the license of Utilization of Ionizing Radiation Resource Group C as referred to in Article 8, the applicant must apply in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12; and
   b. technically referred to in Article 15 paragraph (3).

(2) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(3) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(4) If the licensing application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing licensing requirements document.

(5) Assessment of license's requirements document referred to in paragraph (4) shall be a maximum of 10 (ten) working days from the date of the document declared complete clearance requirements.

(6) If the assessment indicates that the license's requirements document referred to in paragraph (5) has met the requirements, BAPETEN Chairman, within a period of 5 (five) working days, issue a license.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (5) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(8) The applicant must submit the license's requirements repair documents referred to in paragraph (7) not later than 10 (ten) working days after the notice is given to the applicant.

(9) If the applicant does not submit the license's requirements repair documents referred to in paragraph (8), the applicant is considered canceled the license application.

(10) The assessment of the license's requirements repair documents referred to in paragraph (8) shall be a maximum of 10 (ten) working days from the date of the licensing requirements repair documents is received by the BAPETEN Chairman.

(11) If the assessment indicates that the license's requirements repair documents referred to in paragraph (8) has met the license requirements, BAPETEN Chairman, within a maximum period of 5 (five) working days, issue a license.

Article 25

(1) License for usage and/ or research and development of Ionizing Radiation Sources referred to in Article 4 points h the figure 9 to figure 17, published in stages, covering licenses :

a. construction ;

b. operation; and/ or

c. closure.

(2) Closure license referred to in paragraph (1) points c only applies to the use and/ or research and development:

a. category IV irradiators wrapped with radioactive substances referred to in Article 4 point 15 h ;

b. in vivo diagnostic nuclear medicine as referred to in Article 4 to 16 points h , and

c. nuclear medicine therapies as referred to in Article 4 point 17 points h .

(3) Closure license as referred to in paragraph (2) shall be filed Holder 's operating license if :

a. Licensee are not willing to extend the operating license; or

b. Licensee intends to halt the usage and/ or research and development of Ionizing Radiation Sources.

Article 26

(1) In order to obtain a construction license the usage of facilities and/ or research and development of Ionizing Radiation Sources referred to in Article 25 paragraph (1) point a, the applicant must apply in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 18, paragraph a.

(2) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(3) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the documents to the Applicant.

(4) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(5) Assessment of requirements documents license referred to in paragraph (4) shall be a maximum of 20 (twenty) working days from the date of the document declared complete clearance requirements.

(6) If the assessment indicates that the license's requirements document referred to in paragraph (5) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (5) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(8) The applicant must submit documents repair requirements license referred to in paragraph (7) not later than 30 (thirty) working days after notice is given to the applicant.

(9) The assessment of the license's requirements repair documents referred to in paragraph (8) shall be a maximum of 20 (twenty) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(10) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (8), the applicant is considered canceled the license application.

(11) If the assessment indicates that the license's requirements repair documents referred to in paragraph (8) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 27

Construction activities for the utilization facility and/ or research and development of Ionizing Radiation Sources referred to in Article 26 must be commenced by licensee not more than 6 (six) months after the license is issued.

Article 28

(1) An applicant applying for operating license utilization facilities and/ or research and development of Ionizing Radiation Sources referred to in Article 25 paragraph (1) point b after construction activities are completed.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 18 point b.

(3) Upon receipt of license application documents referred to in paragraph (2), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (2) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (2) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 25 (twenty five) working days from the date of license application documents declared complete.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(9) The applicant must submit documents repair requirements license referred to in paragraph (8) a period of 30 (thirty) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 25 (twenty five) working days from the date of the license's requirements repair documents is received by BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has been meet license requirements, BAPETEN Chairman within a maximum period of seven (7) working days, issue a license.

Article 29

(1) To obtain a closure license of the utilization facilities and/ or research and development of Ionizing Radiation Sources referred to in Article 25 paragraph (2), the operating licensee must apply in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 18 point c.

(2) The submission of a written application referred to in paragraph (1) must be made at least 6 (six) months before the operating license expires.

(3) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the documents to Operating Licensee.

(5) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be implemented no later than 30 (thirty) working days from the date of license application documents declared complete.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN

Chairman give notice to the operating licensee no later than 5 (five) working days after the results of the assessment are known.

(9) The operating licensee must submit the license's requirements repair documents referred to in paragraph (8) a period of 30 (thirty) working days after notice is given to the Licensee.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be implemented no later than 30 (thirty five) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) If the licensee fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 30

After the issuance of closure license as referred to in Article 29, licensee shall:

a. discontinue all activities utilization and/ or research and development category IV irradiators with radioactive substances, in vivo diagnostic nuclear medicine, nuclear medicine or therapy; and

b. begin closure activities within a maximum period of 6 (six) months from the issuance of license for closure.

Article 31

(1) Licensed production of radioisotopes as referred to in Article 4 point i published in stages, covering licenses :

a. construction;

b. commissioning;

c.operation; and

d. Closure.

(2) Closure License referred to in paragraph (1) point d must be proposed operating Licensee if:

a. Licensee are not willing to extend the operating license; or

b. Licensee intends to halt production radioisotopes.

Article 32

(1) In order to obtain a construction license of radioisotope production facility as referred to in Article 31 paragraph (1) point a, the applicant must apply in writing to the BAPETEN Chairman by attaching the required documents:

a. administrative referred to in Article 12;

b. technically referred to in Article 15 paragraph (1); and

c. specifically referred to in Article 19, point a.

(2) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 5 (five) working days after the documents are received.

(3) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(4) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(5) Assessment of license's requirements document referred to in paragraph (4) shall be a maximum of 75 (seventy five) working days from the date of the document declared complete clearance requirements.

(6) If the assessment indicates that the license's requirements document referred to in paragraph (5) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (5) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(8) The applicant must submit the license's requirements repair documents referred to in paragraph (7) maximum of 35 (thirty five) working days after notice is given to the applicant.

(9) The assessment of the license's requirements repair documents referred to in paragraph (7) shall be a maximum of 75 (seventy five) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(10) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (8), the applicant is considered canceled the license application.

(11) If the assessment indicates that the license's requirements repair documents referred to in paragraph (8) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 33

Activities to construct radioisotope production facility referred to in Article 32, Licensee must commence no later than 1 (one) year after the license is issued.

Article 34

(1) An applicant applying for a license commissioning radioisotope production facility as referred to in Article 31 paragraph (1) point b after construction activities are completed.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents:

a. administrative referred to in Article 12;

b. technically referred to in Article 15 paragraph (1); and

c. specifically referred to in Article 19, point b.

(3) Upon receipt of license application documents referred to in paragraph (2), BAPETEN Chairman give a statement about the documents no later than 5 (five) working days after the documents are received.

(4) If the license application documents referred to in paragraph (2) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (2) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 75 (seventy five) working days from the date of the document declared complete clearance requirements.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 35 (thirty five) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 75 (seventy five) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issued license.

Article 35

(1) An applicant applying for a license operating of radioisotope production facility as referred to in Article 31 paragraph (1) point c after commissioning activities completed.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 19 point c.

(3) Upon receipt of the application documents referred to in paragraph (2), BAPETEN Chairman give a statement about the documents no later than 5 (five) working days after the documents are received.

(4) If the application documents referred to in paragraph (2) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (2) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 75 (seventy five) working days from the date of the document declared complete clearance requirements.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known .

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 35 (thirty five) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 75 (seventy five) working days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 36

(1) To obtain closure license of radioisotope production facility as referred to in Article 31 paragraph (1) point d, Operating Licensee must apply in writing to the BAPETEN Chairman by attaching the required documents:

a. administrative referred to in Article 12;

b. technically referred to in Article 15 paragraph (1); and

c. specifically referred to in Article 19, paragraph d.

(2) The submission of a written application referred to in paragraph (1) must be made at least 6 (six) months prior to radioisotope production facility operating license expires.

(3) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 5 (five) working days after the documents are received .

(4) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the documents to the radioisotope production facility operating licensee.

(5) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 75 (seventy five) working days from the date of license application documents declared complete.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the operating licensee no later than 5 (five) working days after the results of the assessment are known.

(9) The operating licensee must submit the license's requirements repair documents referred to in paragraph (8) no later than 35 (thirty five) working days after the notice is given to the operating licensee.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 75 (seventy five) working days from the date of the license's requirements repair documents is received by BAPETEN Chairman.

(11) If the licensee fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 37

After the issuance of closure licenses as referred to in Article 36, Licensee shall:

a. cease all activities radioisotope production; and

b. begin closure activities within a maximum period of 1 (one) year after the issuance of license for closure.

Article 38

(1) Radioactive waste management license as referred to in Article 4 points j published in stages, include the license:

a. sitting;

b. construction;

c. commissioning;

d. operation; and

e.Closure.

(2) Closure License referred to in paragraph (1) point e must be applied by operating Licensee if:

a. Licensee are not willing to extend the operating license; or

b. Licensee intends to stop radioactive waste management activities.

Article 39

(1) The applicant must perform site evaluation before applying for a sitting license of radioactive waste management facility as referred to in Article 38 paragraph (1) point a.

(2) The applicant to be able to perform site evaluation referred to in paragraph (1) shall comply with the requirements which include:

a. site Quality Assurance Program; and

b. site evaluation program .

(3) Further stipulation regarding with the requirements of the site evaluation referred to in paragraph (2) is regulated with the BAPETEN Chairman Regulation.

Article 40

(1) The applicant, after the completed site evaluation activities, may apply for a sitting license of radioactive waste management facility as referred to in Article 38 paragraph (1) point a.

(2) The application referred to in paragraph (1), must be submitted in writing to the BAPETEN Chairman by attaching the required documents:

a. administrative referred to in Article 12;

b. technically referred to in Article 15 paragraph (1); and

c. specifically referred to in Article 20 paragraph (1) point a.

(3) Upon receipt of license application documents referred to in paragraph (2), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (2) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (2) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 1 (one) year from the date of the document declared complete clearance requirements.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 60 (sixty) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 90 (ninety) days from the date of the license's requirements repair documents received by BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceling license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 41

(1) An applicant applying a construction license for radioactive waste management facility as referred to in Article 38 paragraph (1) point b of 2 (two) years from sitting license issued.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents:

a. administrative referred to in Article 12;

b. technically referred to in Article 15 paragraph (1); and

c. specifically referred to in Article 20 paragraph (1) point b.

(3) Upon receipt of license application documents referred to in paragraph (2), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (2) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (2) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 90 (ninety) days from the date of the document declared complete clearance requirements.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the assessment result is known.

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 60 (sixty) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 90 (ninety) days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 42

Construction activity radioactive waste management facility as referred to in Article 41, Licensee must commence at the latest 2 (two) years from the license issued.

Article 43

(1) An applicant applying for license commissioning of the radioactive waste management facility as referred to in Article 38 paragraph (1) point c after construction activities are completed.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents :
   a. administrative referred to in Article 12 ;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 20 paragraph (1) point c.

(3) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman return the documents to the Applicant.

(5) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 90 (ninety) days from the date of the document declared complete clearance requirements.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the results of the assessment indicate that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 60 (sixty) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 90 (ninety) days from the date of the license's requirements repair documents is received by the BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 44

(1) An applicant applying for operating licenses for radioactive waste management facility as referred to in Article 38 paragraph (1) point d after commissioning activities completed.

(2) The application referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12 ;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 20 paragraph (1) point d.

(3) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the document to the applicant.

(5) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 90 (ninety) days from the date of license application documents declared complete.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the applicant no later than 5 (five) working days after the results of the assessment are known.

(9) The applicant must submit the license's requirements repair documents referred to in paragraph (8) no later than 60 (sixty) working days after notice is given to the applicant.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 90 (ninety) days from the date of

the license's requirements repair documents is received by the BAPETEN Chairman.

(11) In the event that the applicant fails to submit the license's requirements repair documents referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 45

(1) To obtain a license closure of radioactive waste management facility as referred to in Article 38 paragraph (1) point e, the operating Licensee must apply in writing to the BAPETEN Chairman by attaching the required documents:
   a. administrative referred to in Article 12;
   b. technically referred to in Article 15 paragraph (1); and
   c. specifically referred to in Article 20 paragraph (1) point e.

(2) The submission of a written application referred to in paragraph (1) must be made a minimum of 1 (one) year prior to license operation of a radioactive waste management facility expired.

(3) Upon receipt of license application documents referred to in paragraph (1), BAPETEN Chairman give a statement about the documents no later than 3 (three) working days after the documents are received.

(4) If the license application documents referred to in paragraph (1) shall be declared incomplete, BAPETEN Chairman returns the documents to the operating Licensee.

(5) If the license application documents referred to in paragraph (1) shall be declared complete, BAPETEN Chairman assessing license's requirements document.

(6) An assessment of the license's requirements document referred to in paragraph (5) shall be a maximum of 90 (ninety) days from the date of license application documents declared complete.

(7) If the assessment indicates that the license's requirements document referred to in paragraph (6) has met the requirements, BAPETEN Chairman, within a period of seven (7) working days, issue a license.

(8) If the assessment indicates that the license's requirements document referred to in paragraph (6) does not meet the requirements, BAPETEN Chairman give notice to the operating Licensee no later than 5 (five) working days after the results of the assessment are known.

(9) The operating Licensee must submit the license's requirements repair documents referred to in paragraph (8) no later than 60 (sixty) working days after notice is given to the Licensee.

(10) The assessment of the license's requirements repair documents referred to in paragraph (9) shall be a maximum of 90 (ninety) days from the date of the license's requirements repair documents received by the BAPETEN Chairman.

(11) If the Licensee fails to submit the operating license's requirements repair document referred to in paragraph (9), the applicant is considered canceled the license application.

(12) If the assessment indicates that the license's requirements repair documents referred to in paragraph (9) has met the license requirements, BAPETEN Chairman, within a maximum period of seven (7) working days, issue a license.

Article 46

After the issuance of closing licenses as referred to in Article 45, Licensee shall:

a. cease all activity radioactive waste management; and

b. begin closure activities within a maximum period of 1 (one) year after the issuance of license for closure.

Article 47

In terms of the Closure Licensee as referred to in Article 45 in the form of State-Owned Enterprises, cooperatives, and/ or private entities who cooperate with or designated by the National Nuclear Energy Agency, the implementation of closure using financial guarantee referred to in Article 20 paragraph (2).

Section 2

License Expiration and Renewal

Article 48

(1) License as referred to in Article 22, Article 23, Article 24, Article 25 paragraph (1), Article 31 paragraph (1), and Article 38 paragraph (1) shall apply from the date of issuance of license for up to a period of time.
(2) The validity of the licenses referred to in paragraph (1) is listed in Appendix I are an integral part of this Regulation.

Article 49

(1) License as referred to in Article 22, Article 23, and Article 24 may be extended in accordance with the license validity period.
(2) Licensees who intend to extend the license referred to in paragraph (1) shall apply for a license extension in writing to the BAPETEN Chairman period of 30 (thirty) working days before the license period expired.
(3) A request for extension of license referred to in paragraph (2) shall be accompanied by administrative and technical requirements documents.
(4) If there is a change in facility and/ or Ionizing Radiation Sources, issuance of license extension to the provisions referred to in Article 22, Article 23, or Article 24, in accordance with the Utilization of Ionizing Radiation Sources.
(5) If there are changes to the data in the administrative and technical requirements of Utilization of Nuclear Material, the provision of issuance a license extension is referred to in Article 22.

Article 50

(1) In the event that there are no changing facilities and/ or Ionizing Radiation Source or data in the administrative and technical requirements of Utilization of Nuclear Materials, BAPETEN Chairman assessment and issuance of the license renewal period:
   a. 8 (eight) working days, to license referred to in Article 22;
   b. 6 (six) working days, to license referred to in Article 23; or
   c. 4 (four) working days, to license referred to in Article 24.

(2) The period of assessment and issuance of license extension referred to in paragraph (1) shall be calculated from the administrative and technical requirements document is received by the BAPETEN Chairman.

Article 51

(1) License as referred to in Article 25 paragraph (1), Article 31 paragraph (1), and Article 38 paragraph (1) may be extended in accordance with the period of validity of licenses, except:
   a. sitting license of radioactive waste management facility as referred to in Article 38 paragraph (1) point a; and
   b. closure license referred to in Article 25 paragraph (1) point c, Article 31 paragraph (1) point d, and Article 38 paragraph (1) point e.

(2) Licensees who intend to extend the license referred to in paragraph (1) shall apply in writing to BAPETEN Chairman 75 (seventy five) days before the license period expired.

(3) A request for extension of license referred to in paragraph (2) shall be accompanied by administrative, technical, and specialized requirements document.

(4) If there is a change in facility and/ or Ionizing Radiation Sources, the provision of issuance a license extension is referred to in Article 25 through Article 45, in accordance with the Utilization of Ionizing Radiation Sources.

Article 52

(1) In the event that there are no changing facilities and/ or Ionizing Radiation Sources, BAPETEN Chairman assessment and issuance of the license renewal period:

a. 12 (twelve) working days, to license the usage of facility construction and/ or research and development of Ionizing Radiation Sources referred to in Article 25 paragraph (1) point a;

b. 15 (fifteen) working days, to license the usage of facility operations and/ or research and development of Ionizing Radiation Sources referred to in Article 25 paragraph (1) point b;

c. 50 (fifty) working days, to license the construction , commissioning license and operating license radioisotope production facility as referred to in Article 31 paragraph (1) point a , b , and c; and

d. 75 (seventy five) working days, to the construction license, commissioning license and operating license for radioactive waste management facility as referred to in Article 38 paragraph (1) point b , c , and d.

(2) The period of assessment and issuance of license extension referred to in paragraph (1) shall be calculated from the requirements document administrative, technical, and specifically accepted by the BAPETEN Chairman.

Section 3

Determination of Termination

Article 53

(1) Licensees must apply for a suspension of the determination, if the Licensee intends to stop the usage of Ionizing Radiation Sources and Nuclear Material as referred to in Article 4 points a through h figure 1 to figure 14, Article 6, Article 7, and Article 8.

(2) Application for determination of termination of the activities referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman later than 60 (sixty) days before the validity period expired license, enclosing a report on:

a. data of Ionizing Radiation Sources or Nuclear Materials;
b. the results of measurements of radiation exposure at the facility;
c. ultimate handling of plants ionizing radiation; and/ or
d. ultimate handling radioactive substances or nuclear materials.

(3) Ultimate Handling of radioactive substances or as referred to in paragraph (2) point d include:

a. return shipment of radioactive substances or nuclear materials to a country of origin; or
b. delivery of radioactive materials as radioactive waste to the National Nuclear Energy Agency.

(4) Delivery of Nuclear Material returned to the country of origin as referred to in paragraph (3) point a shall be conducted no later than before the dismantling of nuclear installations done.

(5) Upon receiving the application and the report referred to in paragraph (2), BAPETEN Chairman assessing not later than 14 (fourteen) working days after receipt of the report.

(6) If the assessment results showed:

a. suitability of the data, the BAPETEN Chairman cessation determination issued no later than 14 (fourteen) working days after the assessment referred to in paragraph (5) is known; or
b. inconsistency of data, Licensee must re-submit repair reports no later than 14 (fourteen) working days after the results of the assessment referred to in paragraph (5) is known.

(7) If within the period referred to in paragraph (6) point b Licensee fails to submit repair reports, the application for suspension of the determination is considered canceled.

Section 4

Amendment of License

Article 54

(1) Licensee shall apply for amendment of utilize license:
   a. Ionizing radiation sources, if there are changes to data on:
      1. Licensee identity;
      2. personnel working at the facility;
      3. location's change of Utilization of Ionizing Radiation Sources; or
      4. radiation protection equipment.
   b. nuclear material, if there is data change on the Licensee identity.

(2) Application for amendment of license referred to in paragraph (1) shall be submitted in writing to the BAPETEN Chairman before the data changes.

(3) BAPETEN Chairman assessing the application for amendment of license as referred to in paragraph (2) not later than 3 (three) working days from the date the request is amendment of license received.

(4) If the results of the assessment referred to in paragraph (3) shows:
   a. suitability of the data, the BAPETEN Chairman issue a amendment of license; or
   b. inconsistency of data, Licensee must submit an application for an amendment of license a maximum of 5 (five) working days after the assessment results delivered.

(5) If the Licensee does not submit amendment of license requests within the period referred to in paragraph (4) point b, for amendment of license is considered cancelled.

Article 55

In the event of a change of legal entity Utilization Licensee Ionizing Radiation Sources and Nuclear Materials, or change facilities and/ or Ionizing Radiation Sources, Licensee shall apply for a new license.

Article 56

(1) Applications for new licenses that occur due to changes in the legal entity Licensee as described in Article 55 must be submitted in writing to the BAPETEN Chairman than 2 (two) working days after the change of legal entity authorized by the Licensee or authorized official agencies.

(2) Application for license as referred to in paragraph (1) shall be accompanied by evidence of change in the legal entity which issued by agencies or authorities.

(3) Upon receipt of a written request referred to in paragraph (2), BAPETEN Chairman assessing and issuing new licenses no later than 5 (five) working days after the request is received.

(4) During the application process and the issuance of licenses referred to in paragraph (3) Licensees are prohibited from utilizing of Ionizing Radiation Sources or Nuclear Materials to until the new license is obtained.

Article 57

(1) Applications for new licenses that occur due to changes in facilities and/ or Ionizing Radiation Sources referred to in Article 55 must be submitted in writing to the BAPETEN Chairman prior to the change.

(2) Application for license as referred to in paragraph (1) must be equipped with license requirements in accordance with the Utilization of Ionizing Radiation Sources.

(3) Upon receipt of a written request referred to in paragraph (2), BAPETEN Chairman assessing and issuing new licenses based procedure for requesting and issuance of licenses referred to in Article 22 to Article 45 in accordance with the utilization of Ionizing Radiation Sources.

(4) During the application process and the issuance of licenses referred to in paragraph (3) Licensees are prohibited from utilizing Sources of Ionizing Radiation until the new license is obtained.

Section 5

License expiration

Article 58

License referred to in Article 22, Article 23, Article 24, Article 25 paragraph (1) point a and point b, Article 31 paragraph (1) point a, b, and c, and Article 38 paragraph (1) point b, c , and d ends if:

a. expiration of license;
b. revoked by the BAPETEN Chairman;
c. Licensee bodies dissolved or liquidated;
d. occurs a transfer of Ionizing Radiation Sources or Nuclear Materials; or
e. Individual Licensee dies.

Article 59

(1) In the case of expiration of the license as referred to in Article 58 points a and b, the original Licensees are prohibited from re-using facilities and/ or utilizing Ionizing Radiation Source or nuclear material until a new license is obtained.
(2) To obtain new license as referred to in paragraph (1), the original Licensee shall apply in writing no later than 3 (three) working days after:
    a. the license expiration date; or
    b. issuance of the revocation decision by BAPETEN Chairman.
(3) In order to obtain a new license as referred to in paragraph (1) shall apply the provisions of the application and issuance of licenses referred to in Article 22 to Article 45 in accordance with the Utilization of Ionizing Radiation Sources or Nuclear Materials.

Article 60

(1) In the case of expiration of the license as referred to in Article 58 points a and b, the original Licensee is required to end the handling of radioactive substances or nuclear materials referred to in Article 53 paragraph (3), if it wishes to permanently discontinue usage of Ionizing Radiation Sources or Nuclear Materials.

(2) The final handling of radioactive substances as referred to in paragraph (1) shall be made no later than three (3) working days from:
   a. the license expiration date; or
   b. issuance of a license revocation by BAPETEN Chairman.

(3) The final handling of Nuclear Material as referred to in paragraph (1) shall be conducted no later than before the dismantling of nuclear installations.

(4) Evidence ultimate handling radioactive substances or nuclear materials referred to in paragraph (2) shall be submitted to the BAPETEN Chairman no later than 5 (five) working days from the date of the end of the handling of radioactive substances or nuclear materials.

Article 61

(1) In the case of expiration of the license as referred in Article 58 point c, someone which was given the responsibility for or authorized by legislation to take legal actions for and on behalf of the legal entity should be dispersed or dissolved:
   a. take final handling radioactive substances or nuclear materials referred to in Article 53 paragraph (3) and paragraph (4); and
   b. apply for a suspension of the determination to the BAPETEN Chairman referred to in Article 53 paragraph (1) to paragraph (4).

(2) Application for determination of termination of the activities referred to in paragraph (1) point b shall be submitted in writing to BAPETEN Chairman and accompanied by final proof handling of radioactive substances or nuclear materials.

(3) BAPETEN Chairman assess the application and issued a suspension of the determination of the determination not later than 5 (five) working days after the application is received by the BAPETEN Chairman.

Article 62

(1) In the case of expiration of the license as referred in Article 58 point d, the person or entity receiving the Ionizing Radiation Sources or Nuclear Materials shall apply for permission to the BAPETEN Chairman than 2 (two) working days from the date of the transfer.

(2) Application for license as referred to in paragraph (2) shall be accompanied by documents or evidence of transfer of Ionizing Radiation Sources or Nuclear Materials.

(3) The procedure for application and issuance of license referred to in paragraph (1) shall apply the provisions referred to in Article 22 to Article 45, in accordance with the Utilization of Ionizing Radiation Sources or Nuclear Materials.

(4) During the application process and the issuance of licenses referred to in paragraph (1), the person or entity receiving the Ionizing Radiation Sources or Nuclear Materials prohibited from use until the new license is obtained.

Article 63

(1) In the case of expiration of the license as referred to in Article 58 point e, the person or entity prohibited from utilizing the facility and/ or Ionizing Radiation Sources owned by the original Licensee until a new license is obtained.

(2) To obtain a new license as referred to in paragraph (1), another person must apply in writing to the BAPETEN Chairman by attaching license's requirements accordance with Utilization of Ionizing Radiation Sources.

(3) The procedure for application and issuance of license referred to in paragraph (2) apply the provisions referred to in Article 22 to Article 45 in accordance with the Utilization of Ionizing Radiation Sources.

Article 64

(1) Sitting License of radioactive waste management facility as referred to in Article 38 paragraph (1) point a and Closure license referred to in Article 25 paragraph (2), Article 31 paragraph (1) point d, and Article 38 paragraph (1) point e are expired if the release of the statement issued by the Decree of the BAPETEN Chairman.

(2) To obtain BAPETEN Chairman provision referred to in paragraph (1), Licensee shall apply in writing to the BAPETEN Chairman with attach:
   a. report of final handling of radioactive substances for closure of utilization facility and/ or research Ionizing Radiation Sources referred to in Article 25 paragraph (2), and Closure of radioisotope production facility as referred to in Article 31 paragraph (1) point d; or
   b. report of closing and final status of radioactive waste for final closure of radioactive waste management facility as referred to in Article 38 paragraph (1) point e.

(3) Final handling of radioactive substances referred to in paragraph (2) point include:
   a. shipments of radioactive substances returned to the country of origin; or
   b. delivery of radioactive materials as radioactive waste to the National Nuclear Energy Agency.

(4) Upon receiving the application and the report referred to in paragraph (2), BAPETEN Chairman assessing no later than 21 (twenty one) working days from the receipt of the application and report.

(5) If the results of the assessment indicate that the report referred to in paragraph (2):

a. meet the requirements, BAPETEN Chairman in no later than 14 (fourteen) working days issued the provision after the assessment results are known; or

b. does not meet the requirements, Licensees must submit repair reports not more than 30 (thirty) working days after the assessment results are known.

(6) If within the period referred to in paragraph (5) point b Licensee fails to submit repair reports, the application of exemption statement is considered cancelled.

Section 6

License fee

Article 65

Every license issued by the BAPETEN Chairman, the applicants charged by amount, which regulated with other Government Regulation.

CHAPTER V

LICENSEE OBLIGATIONS

Article 66

(1) Licensee is obliged to:

a. provides an opportunity for the inspection conducted by the BAPETEN Chairman on the utilization facility of Ionizing Radiation and Nuclear Materials;

b. implement health monitoring of radiation workers;

c. provides an opportunity for medical examinations to workers conducted by the BAPETEN Chairman in cooperation with the competent authority in the field of nuclear research and development, health , and man labor to assess the impact of radiation on health;

d. organize documentation, concerning all things concerned with Utilization of Ionizing Radiation Sources or Nuclear Materials;
e. undertake the necessary measures to prevent or minimize hazards arising from Utilization of Ionizing Radiation Sources of Nuclear Material to safety of workers, members of the public and protection of the environment;
f. undertake the necessary measures to prevent unauthorized removal, theft, and sabotage of Radioactive Sources or Nuclear Materials;
g. create and submit reports related Safeguards to the BAPETEN Chairman;
h. utilize Ionizing Radiation Sources or Nuclear Material in accordance with the purpose specified in the license;
i. submit a written report to the BAPETEN Chairman in case of equipment malfunction that led to the incident and / or radiation accidents;
j. submit a report on the monitoring of workers' radiation doses;
k. submit a written report of the work and the results of monitoring the environment around the facility to the BAPETEN Chairman; and/ or
l. carry out the Environmental Management Plan and Environmental Monitoring Plan.

(2) Further stipulation regarding the details of the Licensee obligation in accordance with the Utilization of Ionizing Radiation Sources and Nuclear Materials are regulated with the BAPETEN Chairman Regulation.

Article 67

In addition to the provisions referred to in Article 66, import Licensee and/ or transfer of radioactive substances and/ or generating ionizing radiation as referred to in Article 4, point b to point e and Article 8 points b and c can only import and/ or transfer activities to a person who has had a license Utilization of Ionizing Radiation Sources or Nuclear Material.

Article 68

(1) In case of import and/ or transfer of equipment containing radioactive substances for consumer goods as referred to in Article 7 point a, in addition to the provisions referred to in Article 66, Licensee shall:
   a. inform users about the handling and safety of consumer goods containing radioactive substances; and
   b. report in writing about:
      1. characteristics of radioactive substances; and
      2. transfer and distribution of consumer goods containing radioactive substances.

(2) A written report referred to in paragraph (1) point b shall be submitted to the BAPETEN Chairman maximum of 1 (one) year.

CHAPTER VI

CLEARANCE

Article 69

(1) Radioactive substances, radioactive waste, or contaminated or activated material that has reached the level of Clearance be released from supervision.

(2) To obtain released from supervision referred to in paragraph (1), the applicant must apply for a Clearance provision in writing to the BAPETEN Chairman with the following documents:
   a. the results of measurements of radiation exposure; and
   b. analysis of radionuclide activity and material contained in contaminated or activated.

(3) If the documents referred to in paragraph (2) shows that the rate of Clearance is met, BAPETEN Chairman issues a Clearance Provision.

CHAPTER VII
EXCLUSION OF LIABILITY HAVE PERMISSION TO USAGE IONIZING RADIATION SOURCES

Article 70

The usage of radioactive substances, ionizing radiation generating machine and equipment containing radioactive materials for consumer products are exempt from the requirement to have a license Utilization of Ionizing Radiation Sources.

Article 71

Exemptions to the use of radioactive substances referred to in Article 70 are set based on the value that is less than or equal to the value as listed in Annex II that are not separated by and an integral part of this Regulation.

Article 72

Exemptions to the use of radiation generators referred to in Article 70 stipulated by the provision that:

a. under normal operating conditions, the equipment does not cause the equivalent dose rate exceeds 1 uSv/ hour (micro sievert per hour) in all directions at a distance of 10 cm (ten centimeter) of surface equipment; and
b. maximum energy produced is less than or equal to 5 keV (five kilo electron volts).

Article 73

Exemptions to the use of equipment containing radioactive substances for consumer goods as referred to in Article 70 stipulated by the provision that:

a. type and kind of equipment that is approved by the BAPETEN Chairman;
b. comply with the instructions for usage, storage, handling in accordance with the information provided by the manufacturer or distributor;
c. radioactive substances are made in the form of sealed sources; and
d. under normal operating conditions, does not cause the ambient equivalent dose rate or dose rate equivalent initial not exceed 1 uSv/ hour (one micro sievert per hour) at a distance of 10 cm (four inches) from the surface of the tool .

CHAPTER VIII

APPROVAL

Section 1

Approval Import and Export Sources of Ionizing Radiation or Nuclear Materials

Article 74

(1) Import and export of Ionizing Radiation Sources and Nuclear Material should only be done by the Licensee of Utilization of Ionizing Radiation Sources or Nuclear Materials.
(2) The Licensee shall implement the import or export of Ionizing Radiation Sources or Nuclear Materials referred to in paragraph (1) shall obtain prior approval from the BAPETEN Chairman before Ionizing Radiation Sources or Nuclear Material removed from the customs area.
(3) To obtain the approval referred to in paragraph (2) Licensee shall:
    a. apply in writing to the BAPETEN Chairman;
    b. have import or export license from the authorities in the field of trade; and
    c. convey the import or export documents.
(4) The stipulated concerning the approval of the import and export of Ionizing Radiation sources or nuclear material shall be further are regulated with the BAPETEN Chairman Regulation.

Section 2

Approval to Returns of Radioactive Substances Used and Nuclear Spent Fuel

Article 75

(1) The Licensee shall implement the return shipping radioactive material or nuclear spent fuel to the country of origin must receive approval from BAPETEN.

(2) The approval referred to in paragraph (1) shall be submitted in writing by the Licensee to BAPETEN Chairman, before shipment is carrying out.

Article 76

(1) To obtain the approval of the return shipping radioactive spent nuclear fuel or as referred to in Article 75 Licensees must complete data on:
   a. radioactive material or nuclear fuel to be returned;
   b. schedule of return shipping; and
   c. manufacturer of radioactive substances or nuclear spent fuel.

(2) The stipulated concerning the approval of the return shipping radioactive or nuclear material shall be further are regulated with the BAPETEN Chairman Regulation.

Article 77

Proof of return shipping radioactive substance used or nuclear spent fuel as referred to in Article 76 shall be submitted to the BAPETEN Chairman not later than 14 (fourteen) days from the date of execution of the return shipping.

CHAPTER IX

INSPECTION

Article 78

(1) BAPETEN conduct inspections of the implementation of this Regulation.

(2) Inspection as referred to in paragraph (1) shall be conducted by the nuclear safety inspector.

(3) Inspection as referred to in paragraph (1) shall include administrative and technical checks.

(4) Inspection as referred to in paragraph (1) shall periodically or at any time, with or without notice.

Article 79

(1) Nuclear safety inspector referred to in Article 78 paragraph (2) has the authority to:

a. conduct inspections during the licensing process;

b. enter and inspect any facility or installation, agency or location of Utilization of Ionizing Radiation Sources and of Nuclear Material;

c. radiation monitoring inside and outside of installations;

d. conduct direct inspections or inspections by notification in the short time interval in the case of emergency or abnormal events; and

e. terminate of the Utilize of Ionizing Radiation Sources and Nuclear Material in case of hazardous situations to:

1. safety of workers, the public, and the environment; or

2. Security of Radioactive Sources and the Nuclear Materials.

(2) Termination of Utilization of Ionizing Radiation Sources and Nuclear Material as referred to in paragraph (1) point e can only be done by a nuclear safety inspector after the report on the spot and immediately received orders to the termination of the BAPETEN Chairman.

CHAPTER X

ADMINISTRATIVE SANCTIONS

Article 80

(1) Licensee who violates the provisions of this Regulation subject to administrative sanctions, which include:
   a. written warning; or
   b. revocation of license.

(2) Administrative sanctions referred to in paragraph (1) imposed by the BAPETEN Chairman.

Article 81

(1) Licensee who violates the provisions of Article 27, Article 30, Article 33, Article 37, Article 42, Article 46, Article 54 paragraph (1), Article 55, Article 56 paragraph (1), Article 66, Article 67, Article 68, Article 72 paragraph (2), Article 73 paragraph (1), or Article 75 subject to a written warning.

(2) Licensee shall follow a written warning within a maximum period of 10 (ten) working days from the date of receipt of the warning.

(3) If the Licensee does not follow a written warning referred to in paragraph (2), BAPETEN Chairman give again a written warning.

(4) The written warning referred to in paragraph (3) Licensee shall comply within 10 (ten) working days from the date of receipt of the warning.

(5) If the Licensee still does not comply with a written warning referred to in paragraph (4), BAPETEN Chairman revokes the license.

Article 82

Utilization License of Ionizing Radiation Sources or Nuclear Materials immediately revoked by the BAPETEN Chairman, if known Licensees:

a. not convey the correct data in the document license requirements referred to in Article 12, Article 14, Article 16, Article 18, Article 19, or Article 20;

b. does not carry the obligation referred to in Article 66, Article 67, or Article 68, so that poses a danger to the safety of workers, the public, and environmental protection, and security of radioactive sources and nuclear materials;

c. because the activities lead to radiation accidents or nuclear accident; or

d. utilize of Ionizing Radiation Sources or nuclear material as opposed to the license issued.

CHAPTER XI

TRANSITIONAL PROVISIONS

Article 83

At the time of entry into force of this Regulation, all Nuclear Power Utilization who has obtained a license issued by the Government Regulation No. 64 Year 2000 on Licensing of Nuclear Energy Utilization (State Gazette of the Republic of Indonesia Year 2000 Number 137, Supplement to State Gazette of the Republic of Indonesia Number 3993) shall remain in force, until the period of validity of the license expires.

Article 84

At the time of entry into force of this Regulation, a license application has been submitted and is being processed by BAPETEN carried out in accordance with this Regulation.

CHAPTER XII

FINAL PROVISION

Article 85

At the time this Regulation came into force, the Government Regulation No. 64 Year 2000 on Licensing of Nuclear Energy Utilization (State Gazette of the Republic of Indonesia Year 2000 Number 137, Supplement to State Gazette of the Republic of Indonesia Number 3993) is revoked and declared invalid.

Article 86

At the time this Regulation came into force, all the legislation that regulates the implementation of Government Regulation No. 64 Year 2000 on Licensing of

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Nuclear Energy Utilization (State Gazette of the Republic of Indonesia Year 2000 Number 137, Supplement to State Gazette of the Republic of Indonesia Number 3993) declared shall remain valid as long as not contrary to the provisions of this Regulation.

Article 87

This regulation comes into force upon promulgation.

For public cognizance, this Government Regulation shall be promulgated in the State Gazette of the Republic of Indonesia.

Stipulated in Jakarta , On Date 11 April 2008

PRESIDENT OF THE REPUBLIC OF INDONESIA,

Signed.

DR . H. SUSILO BAMBANG YUDHOYONO

Enacted in Jakarta,

On Date 11 April 2008

MINISTER OF LAW AND HUMAN RIGHTS REPUBLIC OF INDONESIA,

Signed.

ANDI MATTALATTA

STATE GAZZETE OF THE REPUBLIC OF INDONESIA YEAR 2008 NUMBER 54

UNOFFICIAL TRANSLATION

UNOFFICIAL TRANSLATION

EXPLANATION

GOVERNMENT REGULATION OF THE REPUBLIC OF INDONESIA

NUMBER 29 YEAR 2008

CONCERNING

LICENSING OF THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL

I. GENERAL

Licensing is one of the aspects of regulating on Nuclear Energy Utilization in addition to rulemaking and implementation of inspection. Nuclear energy is within the scope of this Regulation covers of Ionizing Radiation Sources and Nuclear Materials. Setting license on Utilization of Ionizing Radiation Sources and Nuclear Material previously stipulated by Government Regulation No. 64 Year 2000 on Licensing of Nuclear Energy Utilization. However, the development of science and technology in the field of nuclear energy has led to rapid changes in international standards must adapted to the laws and regulations in Indonesia. These changes include:

a. license requirements not only consider the radiation safety factor, but also the security of radioactive sources and nuclear materials.

b. Utilization of Ionizing Radiation Sources and Nuclear Materials grouped into three (3) groups.

   The grouping is based on the risks associated with radiation safety and security of radioactive sources and nuclear materials, taking into account:

   1. potential radiation hazards ;
   2. the complexity of facilities and / or Sources of Ionizing Radiation and Nuclear Materials ;
   3. the number and competence of personnel working ;
   4. potential impact on safety of radiation accident , health workers and the public , and the environment , and

5. potential threats to the Nuclear Materials and Radioactive Sources .

c. the enactment the utilization of Ionizing Radiation Sources and Nuclear Material, the requirements and licensing procedures established in accordance with the risks associated with radiation safety and security of radioactive sources and nuclear materials, so the higher the risk of a usage, the license requirement imposed increasingly stringent. In this case Utilization of Ionizing Radiation Sources and Nuclear Material classified into group A, which is the group with the most stringent licensing requirements as compared to group B and group C.

   Meanwhile, license requirements Utilization of Ionizing Radiation Sources Group C is the most simple.

d. enactment of the approval mechanism as one of the implementation of the licensing. This approval includes approval to carry out the activities of the import and export of Ionizing Radiation Sources or Nuclear Materials, return or refund and shipping radioactive materials and nuclear spent fuel to the country of origin.

e. the setting of the exemption from the obligation to have a Utilization license Ionizing Radiation Sources the scope of Government Regulation as mandated by Article 17 of Law No. 10 Year 1997 on Nuclear Energy. The provision explains that there Utilization of Ionizing Radiation Sources that do not require a license. This is because there is Ionizing Radiation Sources with activity below the set value or low energy, and the potential danger of radiation is very low, so it is not necessary licensing and other control mechanisms.

This adjustment is necessary to avoid a legal vacuum and inaccuracies in regulating the implementation of the Utilization of Ionizing Radiation Sources and Nuclear Material, and able to meet the legal needs of the community.

Licensing scope of the Utilization of Ionizing Radiation Sources and Nuclear Material set out in this Regulation includes requirements and licensing

procedures are adapted to use the group consisting of group A, group B and group C. License requirements consist of administrative, technical, and specialized requirements. The entire group of Utilization of Ionizing Radiation Sources and Nuclear materials require administrative requirements, while meeting the technical requirements are distinguished into effect in accordance with the utilization of the group. Special requirements only for Utilization of Ionizing Radiation Resource Group A that requires licenses for sitting, construction, commissioning, operation, and/ or closure. At each stage of the license requires the requirements. Procedure for requesting license set such that the applicant received assurance whether the proposed petition is approved or not. Regulations concerning licensing procedures are made as clear as possible starting from receipt of application to issuance of licenses.

Consent is a mechanism that is required when certain activities will be implemented, such as import and export approvals of Ionizing Radiation Sources and Nuclear Material, and the return of radioactive substances and nuclear fuel to the country of origin. This approval can only be given to the Licensee.

In order to ensure compliance with license requirements and legislation in the field of nuclear energy for Utilization of Ionizing Radiation Sources and of Nuclear Materials required inspections carried out by the nuclear safety inspector.

II. ARTICLE BY ARTICLE

Article 1

Self-explanatory.

Article 2

Self-explanatory.

Article 3

Self-explanatory.

Article 4

Point a.

Self-explanatory.

Point b.

Import and transfer of radioactive substances and/ or generating ionizing radiation for medical purposes is carried out by the same or a legal entity, which shall consist of import, distribution and circulation, following the fixing or installation.

Point c.

Self-explanatory.

Point d.

The scope of the transfer of radioactive substances and/ or generating ionizing radiation for medical purposes is composed of distribution and circulation, including the obligation for distributors or agents to fix or install. The obligation to install this is one effort to ensure accuracy given patient dose.

Point e.

The scope of the transfer of radioactive substances and/ or generating ionizing radiation for medical purposes other than intended, among others, distribution and circulation, not including fixing or installation.

Point f

Self-explanatory.

Point g

Self-explanatory.

Point h

Figures 1

Diagnostic and interventional radiology equipment such as X-ray generator for dental and general examination, angiography, CT-scans, and mammography.

Figures 2

What is meant by "irradiators category I with a radioactive substance capsulated" is irradiators with radioactive substances in a closed container in a confined solid material and radiation shielded at all times, and the design configuration does not allow people to physically access the radioactive and irradiated item.

Figures 3

The term "plant irradiators category I with ionizing radiation" is a kind of machine electron beam irradiators are radiation shielded and maintained so people can't access the machine during operation with electron beam entrance control system.

Figures 4

What is meant by "gauging industrial activity or high energy" is a measurement technique using a radioactive substance such as Cs-137, Co-60 and Am-241 Be, with a range of 0.4 MBq activity of radioactive substances (zero point four mega-becquerel) until with 40 GBq (forty giga-becquerel).

Figures 5

Industrial radiography facilities open is a technical examination of the structure and/ or the quality of the materials by non-destructive testing method that uses Ionizing Radiation Sources is not permanently mounted and can be reached from various accesses.

Figures 6

What is meant by "well logging" is all the activities that include reduction and removal of the measuring instrument or device

containing radioactive substances or which is used to detect the radioactive substance in the drill holes for the purpose of obtaining information or a drill hole in the surrounding geological formations in the exploration and exploitation oil, gas, and geothermal, including geophysical logging for mineral and coal.

Figures 7

What is meant by "tracer" is the use of a radioactive substance given to a system that is intended to follow the behavior of one or several components of the system, the main features include:

a. detected at low concentrations with a system, easy and obvious;
b. injection, detection and/ or sampling obtained without damaging the system; and
c. residual concentration of radioactive substances had no significant effect on the system.

Figures 8

Photofluorography with medium activity radioactive substances or ionizing radiation with an energy plant is being referred to amongst others:

a. radioactive Co-60 gamma transmitters with activity below 100 Ci (one hundred Curie); or
b. X-rays generators are used for analysis, with tube voltages greater than 60 kV (sixty kilovolt) up to 160 kV (hundred sixty kilovolt).

Figures 9

Radiotherapy may include external beam therapy and brachytherapy.

Figures 10

Facilities include equipment calibration is contained in the facilities and radioactive substances are used. The calibration facility is a facility for:

a. do comparative readings of radiation measuring instruments specific to the reading standard radiation measuring instruments; or
b. action irradiate certain radiation measuring instrument in a known radiation field characteristics, through a standard radioactive substances or radiation gauge on the standard reference conditions.

Figures 11

Industrial radiography facility is an enclosed structure inspection techniques and/ or quality of materials with non-destructive test method that uses a fixed Ionizing Radiation Sources that can only be achieved through an access door.

Figures 12

Photofluorography with high activity radioactive substances or generator with high energy ionizing radiation in question such as:

a. radioactive Co-60 gamma emitting the least activity 100 Ci (one hundred Curie); or
b. electron accelerator (Linear Accelerator) with energy in units mega-electron volt or tube voltage in units of approximately 6 MV (six megavolt).

Figures 13

What is meant by "irradiators category II with a radioactive substance capsulated" irradiators with a radioactive substance capsulated are locked in a dry container, has a shield when not in use and maintained so that the irradiated area is not accessible for usage with entry control systems, and can be accessed in a controlled manner.

What is meant by "irradiators category III with a radioactive substance capsulated" irradiators with a radioactive substance capsulated are locked in the storage pond filled with water and has a

shield at all times , and access to radioactive material covered and the irradiated regions are physically restricted in configurations designed and fashion proper usage.

Figures 14

The term "irradiator category II with ionizing radiation generator" is a kind of machine electron beam irradiators are placed in a radiation shielded room, and maintained so that people can't access the machine during operation with electron beam entrance control system.

Figures 15

What is meant by "category IV irradiators with radioactive substances capsulated" irradiators with a radioactive substance capsulated are locked in the storage pond filled with water, has a shield when not in use and maintained so that the irradiated area is not accessible for usage with entry control systems, and can be accessed controlled manner.

Figures 16

What is meant by "in vivo diagnostic nuclear medicine" is the use of radio nuclides and/ or radiopharmaceutical that is inserted into the human body for diagnostic purposes.

Figures 17

What is meant by "nuclear medicine therapy" is the use of radio-nuclides and/ or radiopharmaceutical that is inserted into the human body, for medical purposes.

Point i

Self-explanatory.

Point j

Self-explanatory.

Article 5

Self-explanatory.

Article 6

Point a

Self-explanatory.

Point b

Nuclear scope of mining minerals which shall include one (1) uninterrupted series of stages, starting from the general investigation, exploration, and exploitation, to produce yellow cake with equivalent concentrations of uranium can be split at least 60 % (sixty per cent).

Point c

Scope of manufacture which meant, among others refining, conversion, and enrichment of Nuclear Material.

Point d

The scope of the production which meant, among others fabrication of Nuclear Material.

Point e

Storage, which encompasses the storage of nuclear fuel and nuclear spent fuel.

Point f

The scope of the transfer which meant, among others the distribution and circulation of Nuclear Materials.

Point g

Self-explanatory.

Point h

Scope of the intended use of Nuclear Materials, among others, for the production of radioisotopes and operation of nuclear reactors.

UNOFFICIAL TRANSLATION

Article 7

Point a

Transfer of consumer goods containing radioactive substances in question only apply to activities distribution, circulation, and fixing or installation of consumer goods. Such activities can only be carried out if a person already has license to Utilize Ionizing Radiation Sources, but the obligation to have this license does not apply to end users or consumers of consumer goods containing radioactive substances.

Point b

Storage of radioactive substances in question is another that contains radioactive material, which is a byproduct of the activities include production, mining, or industrial engineering.

Point c

Figures 1

What is meant by "in vitro diagnostic nuclear medicine" is the use of radio-nuclides and/ or radiopharmaceutical outside the human body for diagnostic purposes through the examination of biological specimens.

Figures 2

Baggage fluoroscopy is an ionizing radiation generating equipment with low or moderate energy.

Figures 3

What is meant by "gauging industry with low activity radioactive substances or ionizing radiation generator with low energy" is the measurement techniques such as the use of radioactive substances Pm-147, T1-204, Kr-85, Sr-90, Am-241, Fe-55, Cd-109, Ni-63, with a range of 0.4 MBq activity of radioactive substances (zero point four mega-becquerel) up to 40 GBq (forty giga-becquerel), and aircraft for X-ray analysis (X-ray fluoresence) and diffraction (X-ray difraction) with energies up to 60 kV (sixty kilovolt).

Article 8

Point a

Self-explanatory.

Point b

What is meant by "import ionizing radiation generator for medical purposes" is an activity that is only intended to include generating ionizing radiation for medical purposes to jurisdiction Republic of Indonesia, without the distribution and/ or distribution, and installation or installation. If importers want to do the distribution and/ or circulation, which are followed by the installation or installations, importers apply for a license transfer of ionizing radiation generator for medical purposes.

Point c

What is meant by "import generators besides ionizing radiation for medical purposes" is an activity that is only intended to include generating ionizing radiation for medical purposes in addition to the jurisdiction of the Republic of Indonesia, without the distribution and/ or circulation.

Point d

Figures 1

Radioactive substances is open or capsulated for educational purposes, research, and development is to use radioactive substances with activity or very low energy, with a very low risk anyway.

Figures 2

Self-explanatory.

Figures 3

Self-explanatory.

Figures 4

Self-explanatory.

Figures 5

Self-explanatory.

Article 9

Self-explanatory.

Article 10

Paragraph (1)

The definition of "person" is the individual.

The definition of "agency" is the Indonesian legal entities and business entities domiciled in and established by the laws of Indonesia.

Paragraph (2)

Self-explanatory.

Article 11

Self-explanatory.

Article 12

Point a

What is meant by "License applicant identity" among others, in the form of National Identity Card or a Temporary Resident License Cards for applicants for individuals, leaders or officials of government agencies, or the board of directors is authorized to represent and be responsible for an agency within or outside the court.

Point b

Self-explanatory.

Point c

License and/ or requirements set by other agencies such as Trading License, license the circulation associated with medical devices from the competent authority in the field of health, Importer Identification Number or Importer Identification Number Limited, Industrial Business License, Building License, location license, residence license legal entity or business entity, land rights, and/ or Permanent Business License.

Point d

What is meant by "the location Utilization of Ionizing Radiation Sources and Nuclear Material" is a Ionizing Radiation Source or Nuclear Material utilized. Utilization of Ionizing Radiation Sources for this is related to the place of Ionizing Radiation Sources operated or used, which usually is not same as the domicile of the legal entity or business entity.

Article 13

Self-explanatory.

Article 14

Paragraph (1)

Point a

Self-explanatory.

Point b

Self-explanatory.

Point c

Radiation protection equipment is composed of:

a. equipment monitoring radiation levels and/ or radioactive contamination in the working area;
b. individual dose monitoring equipment;
c. environmental radioactivity monitoring equipment; and/ or
d. radiation protective equipment.

Types of radiation protection equipment used according to Utilization of Ionizing Radiation Sources and Nuclear Materials which will be implemented by the applicant.

Radioactive Sources Safety equipment consists of safety equipment provided for usage, storage, and transport of Radioactive Sources. The type and completeness of Radioactive Sources security equipment tailored to the security group of Radioactive Sources.

Point d

Radiation protection and safety program, among others, contains about:

a. organizers radiation safety;
b. personnel working at the facility or installation;
c. regional division of labor;
d. monitoring exposure to radiation and/ or radioactive contamination in the working area;
e. monitoring radioactivity in the environment outside the facility or installation;
f. Quality Assurance program of radiation protection and safety;
g. Emergency Response Plan;
h. description of consumer goods, the usage and benefits of the product, function, and radio-nuclides contained in the consumer goods; and/ or
i. radionuclide activity to be used in consumer goods.

The scope and content of the radiation protection program tailored to Utilization of Ionizing Radiation Sources and Nuclear Material.

Security of Radioactive Sources program, among others contains about:

a. introduction ;
b. safety management of radioactive sources;

c. Radioactive Sources descriptions, facilities and surrounding environment;
d. transport procedures;
e. operational procedures;
f. training;
g. inventory; and
h. reporting.

Point e

Radiation safety verification reports, among others, contains about:

a. the nature and magnitude of potential exposures , and possible;
b. limits and technical conditions for the operation of the source;
c. the possibility of failure of structures, systems, components, and/ or procedural errors related to the protection and safety, and the impact if a failure occurs;
d. changes of the environment setting that affect to protection and safety;
e. the possibility of errors operating procedures, and due to errors caused; and/ or
f. impact on the protection and safety, if the modification.

The scope and content of reports tailored to the verification of the safety of radiation sources Utilization of Ionizing Radiation and Nuclear Materials.

Security of Radioactive Sources verification report include the following:

a. identification of Radioactive Sources and its characteristics;
b. determination of potential threats; and
c. analysis of the weaknesses of Radioactive Sources.

Point f

What is meant by "medical examination of radiation workers" is the result of the medical examination of radiation workers who will be

involved in Utilization of Ionizing Radiation Sources and Nuclear Materials:

a. before the relevant work in the applicant's license; and/ or
b. for doing work that involves the use of Ionizing Radiation Sources and Nuclear Material elsewhere.

Point g

Figures 1

Radiation protection officer is a main personnel in the Utilization of Ionizing Radiation Sources and Nuclear Materials responsible for the implementation of the requirements radiation safety at the facility or installation. While other personnel in question are radiation workers, operators, supervisors, dosimeter personnel, maintenance and repair personnel, and/ or experts in accordance with the Utilization of Ionizing Radiation Sources and Nuclear Materials.

Figures 2

Personnel who handle Ionizing Radiation Sources in question were the personnel in charge to Utilize Ionizing Radiation Sources Group C. These personnel are not required to have a special skill or competence to be worked with Ionizing Radiation Sources as well as radiation protection officers and other personnel.

Figures 3

Radioactive Sources security officers in question are personnel at the facility are given the task and responsibility to implement safeguards of Radioactive Sources.

Nuclear Materials Security officers in question are personnel assigned facilities in and responsibility for the implementation of physical protection and/ or inventory of Nuclear Material.

Paragraph (2)

Self-explanatory.

Article 15

Self-explanatory.

Article 16

Self-explanatory.

Article 17

Self-explanatory.

Article 18

Point a

Construction scope is only related to radiation protection and safety requirements, and security of radioactive sources, such as the calculation of thick walls and doors, density, and material.

Facility construction activities using Ionizing Radiation Sources referred to in this Article is:

a. construction or erection of a building or buildings as regulated in Law Number 28 of 2002 on Building; and
b. construction work as stipulated in Law No. 18 Year 1999 on Construction Services.

Point b

Quality Assurance Program operation is only applied to the usage and/ or research and development of Ionizing Radiation Sources in the medical field or the end product of this activity is used to humans. Quality Assurance Program operation is among other things, contains about:

a. manager of quality assurance;

b. policies and procedures for the implementation of quality assurance;
c. quality audit program;
d. documentation;
e. education and training; and/ or
f. mismatch control.

The technical document which meant is a description of the physical condition of Ionizing Radiation Sources as evidenced by quality certificates radioactive substances or ionizing radiation generator, which is issued by the manufacturer.

Point c

Self-explanatory.

Article 19

Point a

Figures 1

Self-explanatory.

Figures 2

Construction programs, among others, contains about:

a. radioisotope production facility design in accordance with the standards of radiation safety and security of radioactive sources; and
b. Quality Assurance Program for construction of radioisotope production facility.

Point b

Figures 1

Commissioning programs, among others, contains about:

a. schedule of commissioning activities;
b. testing procedures;
c. types of testing; and
d. acceptance criteria.

Figures 2

Self-explanatory.

Figures 3

Self-explanatory.

Point c

Self-explanatory.

Point d

Self-explanatory.

Article 20

Paragraph (1)

Point a

Site evaluation report shall include:

a. implementing organizational structure;
b. documentation and reporting;
c. evaluation and analysis of data on:
    1. the influence of external events on the site and surrounding area, including but not limited seismology, floods, volcanologist crash estimates, hydrology, meteorology, geology, and tsunamis;
    2. environmental characteristics of the site and the impact on radioactive waste management facilities; and
    3. population demographics and other characteristics of the site related to the evaluation of risks to members of the public and the feasibility of implementing the plan emergency responders.

The main data facility includes:

a. estimation of the maximum radiological and thermal effluents that will be generated by any radioactive waste management facility;

b. location of radioactive waste management facilities at the site; and

c. discharge of effluents.

Point b

Figures 1

Self-explanatory.

Figures 2

Construction programs, among others, contains about:

a. facility design in accordance with the standards of safety and security of radiation sources radioactive;

b. Construction Quality Assurance program for radioactive waste management facility;

c. procedures and construction schedule;

d. waste acceptance criteria; and

e. initial waste placement plan.

Point c

Figures 1

Self-explanatory.

Figures 2

Commissioning programs, among others, contains about:

a. schedule of commissioning activities;

b. testing procedures;

c. types of testing; and

d. acceptance criteria.

Figures 3

Self-explanatory.

Point d

Self-explanatory.

Point e

Closure plans final part contains about:

a. implementation of decontamination procedures, facility cleaning, and restoration of the site;
b. removal of radioactive waste;
c. Quality Assurance program for closing radioactive waste management facilities; and
d. manufacture, storage, and maintenance records.

Paragraph (2)

Self-explanatory.

Article 21

Self-explanatory.

Article 22

Self-explanatory.

Article 23

Self-explanatory.

Article 24

Self-explanatory.

Article 25

Self-explanatory.

Article 26

Self-explanatory.

Article 27

Self-explanatory.

Article 28

Self-explanatory.

Article 29

Self-explanatory.

Article 30

Self-explanatory.

Article 31

Self-explanatory.

Article 32

Self-explanatory.

Article 33

Limitation of time for construction is intended to ensure that all requirements associated with the construction of a radioisotope production facility are not expired.

What is meant by "execution of construction activity" is started from the foundation up to the main radioisotope production facility was completed.

Article 34

Self-explanatory.

Article 35

Self-explanatory.

Article 36

Self-explanatory.

Article 37

Self-explanatory.

Article 38

Self-explanatory.

Article 39

Self-explanatory.

Article 40

Self-explanatory.

Article 41

Self-explanatory.

Article 42

Limitation of time for construction is intended to ensure that all requirements associated with the site is not expired and is still a decent site conditions for construction of a radioactive waste management facility .

The definition of "construction activities" was started since the foundation up to the main facility for radioactive waste management was completed.

Article 43

Self-explanatory.

Article 44

Self-explanatory.

Article 45

Self-explanatory.

Article 46

Self-explanatory.

Article 47

Self-explanatory.

Article 48

Self-explanatory.

Article 49

Paragraph (1)

Self-explanatory.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Changes of facility and/ or of Ionizing Radiation Source can be seen, among others, of the license renewal application and the results of inspections by nuclear safety inspectors.

Changes in facilities or installations that usage nuclear materials are not included in the arrangements contemplated in this paragraph. Changes in facilities or installations do not affect license renewal process Utilization of Nuclear Material, Nuclear Material Utilization license given a juridical instrument separate from the licensing of nuclear installations that make usage of Nuclear Material. Regulation on nuclear installations licensing are not included in the scope of this Government Regulation.

Paragraph (5)

Self-explanatory.

Article 50

Self-explanatory.

Article 51

Paragraph (1)

Self-explanatory.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Changes facility and/ or Ionizing Radiation Source can be seen, among others, of the license renewal application and the results of inspections by nuclear safety inspectors.

Article 52

Self-explanatory.

Article 53

Paragraph (1)

The meaning of "termination of activities on Utilization Ionizing Radiation Sources or Nuclear Material" is Licensee:

a. not willing to extend the license is still valid;
b. not wish to continue Utilize Ionizing Radiation Sources and Nuclear Material originally; or
c. willing to stop operation of the facility before the expiration license expires.

Paragraph (2)

Enactment of the period of 60 (sixty) days is intended to Licensees have a plan and a mature and comprehensive orientation to Utilize of Ionizing Radiation Sources and Nuclear Material done.

In addition to the Licensee is expected to have enough time to prepare all the necessary requirements for the determination of cessation of these activities.

Point a

What is meant by "data Ionizing Radiation Sources", include the name, kind, type , activity and/ or energy, and usage.

What is meant by "data of Nuclear Materials", include the name, type , composition, enrichment, fuel fractions (bum-up fraction), and usage.

Point b

Self-explanatory.

Point c

What is meant by "the end of handling ionizing radiation generator" is the final placement of ionizing radiation generator that was in use and end user status, which among other things can be either destruction or transfer. In the report, the document also stated that the Licensee or any accompanying written evidence of these activities.

Point d

Self-explanatory.

Paragraph (3)

Proof of return shipping or delivery as evidence of radioactive waste to the National Nuclear Energy Agency are included in the determination of the termination petition is filed.

Paragraph (4)

Self-explanatory.

Paragraph (5)

Assessment is based on the data submitted in the application for determination of termination and inspection results conducted by nuclear safety inspectors.

Paragraph (6)

The length of the assessment period adjusted to Ionizing Radiation Sources and Nuclear Material Group, and the risks associated with radiation safety and/ or security of radioactive sources and nuclear materials. Obviously the higher the risk is suppose Utilization Ionizing radiation sources is a group that requires permission gradual,

assessment period is the longest, while for group C, which is the most low- risk group, would require a period of assessment is the most concise.

Paragraph (7)

Self-explanatory.

Article 54

Paragraph (1)

Point a

Figures 1

What is meant by "change of Licensee identity " shall consist of:

a. alteration or replacement of officers who led an agency or work unit within a public entity in accordance with the duties and functions in accordance with laws and regulations; or
b. changes in the composition of the board or directors of a law passed and meet legislation .

Figures 2

Self-explanatory.

Figures 3

What is meant by " locations moving of Utilization of Ionizing Radiation Sources" in this article only covers the Ionizing Radiation sources are used for a certain period of time, such as for mobile sources in industrial radiography facilities open activity, logging, and gauging the industry with high activity radioactive substances.

Figures 4

Self-explanatory.

Point b

What is meant by "change of Licensee identity" shall consist of:

a. alteration or replacement of officers who led an agency or work unit within a public entity in accordance with the duties and functions in accordance with the laws and regulations; or
b. changes in the composition of the board or directors of a law passed and meet laws and regulations.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Self-explanatory.

Paragraph (5)

Self-explanatory.

Article 55

What is meant by "changing facilities and/ or Ionizing Radiation Sources", among others :

a. permanent change of Ionizing Radiation Sources used, consisting of Ionizing Radiation Sources moving location of the old facility to facility or moving location to new building, remain attached to source; or
b. modifications done to the facility or process that involves changes to the facility or equipment. Implementation of the modification is not opened opportunities for radioactive substances.

Article 56

Paragraph (1)

The definition of "competent authority" is the agency whose duties and authority in the field of law and legislation.

The definition of "competent authority" is a notary in accordance with laws and regulations.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Self-explanatory.

Article 57

Self-explanatory.

Article 58

Self-explanatory.

Article 59

Paragraph (1)

What is meant by "original Licensee" is a person or entity who initially had received license to utilize Ionizing Radiation Resource or Nuclear Materials.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Article 60

Paragraph (1)

What is meant by "original Licensee" is a person or entity who initially had received license to utilize Ionizing Radiation Resource or Nuclear Materials.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Self-explanatory.

Article 61

Self-explanatory.

Article 62

Self-explanatory.

Article 63

Self-explanatory.

Article 64

Paragraph (1)

Waiver by the Decree of the BAPETEN Chairman a decision stating that the facility closure activities, decontamination, and restoration site facility free from radiation hazards and radioactive contamination.

Paragraph (2)

Point a

Evidence ultimate handling radioactive substances carried out by closure Licensee included in a report submitted to BAPETEN.

Point b

At the time of closure of radioactive waste management facility, which is performed to determine the final status of waste, among others, by moving the radioactive waste remains at the facility for radioactive waste management facility or a new one.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Self-explanatory.

Paragraph (5)

Self-explanatory.

Article 65

Self-explanatory.

Article 66

Self-explanatory.

Article 67

Self-explanatory.

Article 68

This setting is necessary given the existence BAPETEN not supervise or consumer end users of consumer products containing radioactive substances because the consumer products excluded from the requirement to hold a license, so the only control access to the distributor or dealer of this product.

Which meant, by "informed" is included instructions and/ or documents provided by the manufacturer.

What is meant by "handling" such as usage, storage for use.

The definition of "security" among other end storage.

During utilize consumer products containing radioactive material, the user should obey all the information or instructions given by the distributor.

Article 69

Paragraph (1)

The definition of "excluded from supervision" is an activity to utilize Ionizing Radiation source no longer required to have a license and no longer inspected by BAPETEN.

Liberation here can be interpreted as a waiver of radioactive substances, radioactive waste, or contaminated or activated material directly into the environment, provided that the radioactive substance or radioactive

waste is only a form of open source, and the release of the Licensee attention capacity of the environment in which the release is done.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Article 70

Self-explanatory.

Article 71

Self-explanatory.

Article 72

Self-explanatory.

Article 73

Self-explanatory.

Article 74

Paragraph (1)

This clause is intended in part to prevent illicit trafficking of Ionizing Radiation Sources and Nuclear Materials. The restrictions are allowed to import or export Ionizing Radiation Sources and Nuclear Material is an effort for the existence of two such objects in the territory of Indonesia since the beginning of the entry, use, until the process of returning to the country of origin or the end of the treatment can be monitored and recorded properly.

Utilization License Ionizing Radiation Sources and Nuclear Material referred to in this article are the import and export licenses of Ionizing Radiation Sources and Nuclear Materials issued by BAPETEN. This license is only recommendation to the import or export license issued by the competent authority in the field of trade, which is the major mechanism of clearance, and trade system.

Recommendation in question is about the fulfillment of the requirements of radiation safety and / or security of radioactive sources and nuclear materials.

Paragraph (2)

Import and export approval is required to state the truth and appropriateness Ionizing Radiation Sources and Nuclear Materials imported or exported with the license contained in the Utilization of Ionizing Radiation Sources and Nuclear Materials. The Licensee requested approval whenever imports and exports carried out, in order to control and supervise the functions of the circulation of Utilization Ionizing Radiation Sources and of Nuclear Material and granted permission powerful and effective.

Paragraph (3)

Point a

Self-explanatory.

Point b

Self-explanatory.

Point c

What is meant by "the export and import documents" include the packing list, airway bill or bill of lading, commercial invoices, and shipper's declaration of dangerous goods.

Paragraph (4)

Self-explanatory.

Article 75

Self-explanatory.

Article 76

Self-explanatory.

Article 77

Self-explanatory.

Article 78

Self-explanatory.

Article 79

Self-explanatory.

Article 80

Self-explanatory.

Article 81

Self-explanatory.

Article 82

Self-explanatory.

Article 83

Self-explanatory.

Article 84

Self-explanatory.

Article 85

Self-explanatory.

Article 86

Self-explanatory.

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Article 87

Self-explanatory.

SUPPLEMENT TO STATE GAZETTE OF THE REPUBLIC OF INDONESIA

NUMBER 4839

UNOFFICIAL TRANSLATION

APPENDIX I
GOVERNMENT REGULATION OF THE
REPUBLICH OF INDONESIA
NUMBER : 29 Year 2008
DATE : 11 APRIL 2008

LICENSES VALIDITY OF THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL

THE UTILIZATION OF IONIZING RADIATION SOURCES AND NUCLEAR MATERIAL	LICENSES VALIDITY
GROUP A	
a. Ionizing Radiation Sources	
1. Export of Radioactive Substance	1 (one) year
2. Import and transfer of radioactive substance and/ or ionizing radiation generator for medical purposes	1 (one) year
3. Import radioactive substance for other medical purposes	1 (one) year
4. Transfer of radioactive substance and/ or ionizing radiation generator for medical purposes	1 (one) year
5. Transfer of radioactive substance and/ or ionizing radiation generator for other medical purposes	1 (one) year
6. Ionizing radiation generator production	2 (two) years
7. Consumer goods with radioactive content production	2 (two) years
8. Utilization and/ or research and development in:	
a) Diagnostic and interventional radiology	2 (two) year through 3 (three) years
b) Category I Irradiator with capsulated radioactive substance	5 (five) years
c) Category I Irradiator with ionizing radiation generator	5 (five) years

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d) Industrial Gauging with high activity radioactive substance	2 (two) years
e) Open facility industrial radiography	1 (one) year through 2 (two) years
f) Well logging	2 (two) years
g) Tracer	1 (one) year
h) Photofluorography with middle activity radioactive substance or ionizing radiation generator with middle energy	2 (two) years
i) Radiotherapy	
1) Construction license	1 (one) year
2) Operation license	1 (one) year through 2 (two) years
j) Calibration Facility	
1) Construction license	1 (one) year
2) Operation license	2 (two) years
k) Closed facility industrial radiography	
1) Construction license	1 (one) year
2) Operation license	1 (one) year through 2 (two) years
l) Photofluorography with high activity radioactive substance or ionizing radiation generator with high energy	
1) Construction license	1 (one) year
2) Operation license	2 (two) years
m) Category II and III irradiator with capsulated radioactive substance	
1) Construction license	2 (two) years

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2) Operation license	2 (two) years through 4 (four) years
n) Category II irradiator with ionizing radiation generator	
1) Construction license	1 (one) year
2) Operation license	1 (one) year
o) Category IV irradiator with capsulated radioactive substance	
1) Construction license	1 (one) year
2) Operation license	2 (two) years through 4 (four) years
p) In vivo diagnostic nuclear medicine	
1) Construction license	2 (two) years
2) Operation license	1 (one) year
q) Therapy nuclear medicine	
1) Construction license	2 (two) years
2) Operation license	1 (one) year
9. Radioisotope production	
a) Construction license	2 (two) years
b) Commissioning license	1 (one) year
c) Operation license	2 (two) years
10. Radioactive waste management	
a) Construction license	2 (two) years
b) Commissioning license	1 (one) year
c) Operation license	5 (five) years
b. Nuclear Material	
1. Research and development	3 (three) years

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2. Mining on nuclear material	3 (three) years
3. Manufacture	2 (two) years
4. Production	2 (two) years
5. Storage	5 (five) years
6. Transfer	1 (one) year
7. Import and export	1 (one) year
8. Usage	5 (five) year
GROUP B	
a. Import, export, and/ or transfer equipment containing radioactive substance for consumer goods	2 (two) years
b. Radioactive substance storage	5 (five) years
c. Utilization and/ or research and development in:	
1. In vitro diagnostic nuclear medicine	2 (two) years
2. Baggage fluoroscopy	5 (five) years
3. Industrial Gauging with low activity radioactive substance or ionizing radiation generator with low energy	3 (three) years

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GROUP C	
a. Export of ionizing radiation generator	3 (three) years
b. Import of ionizing radiation generator for medical purposes	3 (three) years
c. Import of ionizing radiation generator for other medical purposes	3 (three) years
d. Utilization and/ or research and development:	
1. Opened or capsulated radioactive substance for education, research and development purposes	5 (five) years
2. Check-sources	5 (five) years
3. Radioactive substance for calibration	5 (five) years
4. Radioactive substance for standardization	5 (five) years
5. Explosive detection	5 (five) years

PRESIDENT OF THE REPUBLIC OF INDONESIA

Signed

DR. SUSILO BAMBANG YUDHOYONO

Copy as original

DEPUTY FOR STATE SECRETARY

ON REGULATIONS,

Signed

MUHAMMAD SAPTA MURTI

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APPENDIX II
GOVERNMENT REGULATION OF THE
REPUBLICH OF INDONESIA
NUMBER : 29 Year 2008
DATE : 11 APRIL 2008

TABEL OF EXEMPTION: EXEMPTION ACTIVITY CONCENTRATION AND EXEMPTION ACTIVITY OF RADIONUCLIDE

Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
H-3	1×10^6	1×10^9	Fe-52	1×10^1	1×10^6
Be-7	1×10^3	1×10^7	Fe-55	1×10^4	1×10^6
C-14	1×10^4	1×10^7	Fe-59	1×10^1	1×10^6
O-15	1×10^2	1×10^9	Co-55	1×10^1	1×10^6
F-18	1×10^1	1×10^6	Co-56	1×10^1	1×10^5
Na-22	1×10^1	1×10^6	Co-57	1×10^2	1×10^6
Na-24	1×10^1	1×10^5	Co-58	1×10^1	1×10^6
Si-31	1×10^3	1×10^6	Co-58m	1×10^4	1×10^7
P-32	1×10^3	1×10^5	Co-60	1×10^1	1×10^5
P-33	1×10^5	1×10^8	Co-60m	1×10^3	1×10^6
S-35	1×10^5	1×10^8	Co-61	1×10^2	1×10^6
Cl-36	1×10^4	1×10^6	Co-62m	1×10^1	1×10^5
Cl-38	1×10^1	1×10^5	Ni-59	1×10^4	1×10^8
Ar-37	1×10^6	1×10^8	Ni-63	1×10^5	1×10^8
Ar-41	1×10^2	1×10^9	Ni-65	1×10^1	1×10^6

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Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
K-40	1×10^2	1×10^6	Cu-64	1 x 102	1×10^6
K-42	1×10^2	1×10^6	Zn-65	1×10^1	1×10^6
K-43	1×10^1	1×10^6	Zn-69	1×10^4	1×10^6
Ca-45	1×10^4	1×10^7	Zn-69m	1×10^2	1×10^6
Ca-47	1×10^1	1×10^6	Ga-72	1×10^1	1×10^5
Sc-46	1×10^1	1×10^6	Ge-71	1×10^4	1×10^8
Sc-47	1×10^2	1×10^6	As-73	1×10^3	1×10^7
Sc-48	1×10^1	1×10^5	As-74	1×10^1	1×10^6
V-48	1×10^1	1×10^5	As-76	1×10^2	1×10^5
Cr-51	1×10^3	1×10^7	As-77	1×10^3	1×10^6
Mn-51	1×10^1	1×10^5	Se-75	1×10^2	1×10^6
Mn-52	1×10^1	1×10^5	Br-82	1×10^1	1×10^6
Mn-52m	1×10^1	1×10^5	Kr-74	1×10^2	1×10^9
Mn-53	$1 \times 10_4$	1×10^9	Kr-76	1×10^2	1×10^9
Mn-54	1×10^1	1×10^6	Kr-77	1×10^2	1×10^9
Mn-56	1×10^1	1×10^5	Kr-79	1×10^3	1×10^5
Kr-81	1×10^4	1×10^7	Tc-97	1×10^3	1×10^8
Kr-83m	1×10^5	1×10^{12}	Tc-97m	1×10^3	1×10^7
Kr-85	1×10^5	1×10^4	Tc-99	1×10^4	1×10^7
Kr-85m	1×10^3	1×10^{10}	Tc-99m	1×10^2	1×10^7
Kr-87	1×10^2	1×10^9	Ru-97	1×10^2	1×10^7
Kr-88	1×10^2	1×10^9	Ru-103	1×10^2	1×10^6
Rb-86	1×10^2	1×10^5	Ru-105	1×10^1	1×10^6
Sr-85	1×10^2	1×10^6	Ru-106a	1 x 102	1×10^5
Sr-85m	1×10^2	1×10^7	Rh-103m	1×10^4	1×10^8

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Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
Sr-87m	1×10^2	1×10^6	Rh-105	1×10^2	1×10^7
Sr-89	1×10^3	1×10^6	Pd-103	1×10^3	1×10^8
Sr-90a	1×10^2	1×10^4	Pd-109	1×10^3	1×10^6
Sr-91	1×10^1	1×10^5	Ag-105	1×10^2	1×10^6
Sr-92	1×10^1	1×10^6	Ag-110m	1×10^1	1×10^6
Y-90	1×10^3	1×10^5	Ag-111	1×10^3	1×10^6
Y-91	1×10^3	1×10^6	Cd-109	1×10^4	1×10^6
Y-91m	1×10^2	1×10^6	Cd-115	1×10^2	1×10^6
Y-92	1×10^2	1×10^5	Cd-115m	1×10^3	1×10^6
Y-93	1×10^2	1×10^5	In-111	1×10^2	1×10^6
Zr-93a	1×10^3	1×10^7	In-113m	1×10^2	1×10^6
Zr-95	1×10^1	1×10^6	In-114m	1×10^2	1×10^6
Zr-97a	1×10^1	1×10^5	In-115m	1×10^2	1×10^6
Nb-93m	1×10^4	1×10^7	Sn-113	1×10^3	1×10^7
Nb-94	1×10^1	1×10^6	Sn-125	1×10^2	1×10^5
Nb-95	1×10^1	1×10^6	Sb-122	1×10^2	1×10^4
Nb-97	1×10^1	1×10^6	Sb-124	1×10^1	1×10^6
Nb-98	1×10^1	1×10^5	Sb-125	1×10^2	1×10^6
Mo-90	1×10^1	1×10^6	Te-123m	1×10^2	1×10^7
Mo-93	1×10^3	1×10^8	Te-125m	1×10^3	1×10^7
Mo-99	1×10^2	1×10^6	Te-127	1×10^3	1×10^6
Mo-101	1×10^1	1×10^6	Te-127m	1×10^3	1×10^7
Tc-96	1×10^1	1×10^6	Te-129	1×10^2	1×10^6
Tc-96m	1×10^3	1×10^7	Te-129m	1×10^3	1×10^6
Te-131	1×10^2	1×10^5	Ce-143	1×10^2	1×10^6

UNOFFICIAL TRANSLATION

Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
Te-131m	1×10^1	1×10^6	Ce-144[a]	1×10^2	1×10^5
Te-132	1×10^2	1×10^7	Pr-142	1×10^2	1×10^5
Te-133	1×10^1	1×10^5	Pr-143	1×10^4	1×10^6
Te-133m	1×10^1	1×10^5	Nd-147	1×10^2	1×10^6
Te-134	1×10^1	1×10^6	Nd-149	1 x 102	1×10^6
I-123	1×10^2	1×10^7	Pm-147	1×10^4	1×10^7
I-125	1×10^3	1×10^6	Pm-149	1×10^3	1×10^6
I-126	1×10^2	1×10^6	Sm-151	1×10^4	1×10^8
I-129	1×10^2	1×10^5	Sm-153	1×10^2	1×10^6
I-130	1×10^1	1×10^6	Eu-152	1×10^1	1×10^6
I-131	1×10^2	1×10^6	Eu-152m	1×10^2	1×10^6
I-132	1×10^1	1×10^5	Eu-154	1×10^1	1×10^6
I-133	1×10^1	1×10^6	Eu-155	1×10^2	1×10^7
I-134	1×10^1	1×10^5	Gd-153	1×10^2	1×10^7
I-135	1×10^1	1×10^6	Gd-159	1×10^3	1×10^6
Xe-131m	1×10^4	1×10^4	Tb-160	1×10^1	1×10^6
Xe-133	1×10^3	1×10^4	Dy-165	1×10^3	1×10^6
Xe-135	1×10^3	1×10^{10}	Dy-166	1×10^3	1×10^6
Cs-129	1×10^2	1×10^5	Ho-166	1×10^3	1×10^5
Cs-131	1×10^3	1×10^6	Er-169	$1x\ 10^4$	1×10^7
Cs-132	1×10^1	1×10^5	Er-171	1×10^2	1×10^6
Cs-134m	1×10^3	1×10^5	Tm-170	1×10^3	1×10^6
Cs-134	1×10^1	1×10^4	Tm-171	1×10^4	1×10^8
Cs-135	1×10^4	1×10^7	Yb-175	1×10^3	1×10^7
Cs-136	1×10^1	1×10^5	Lu-177	1×10^3	1×10^7

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Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
Cs-137a	1 x 10^1	1 x 10^4	Hf-181	1 x 10^1	1 x 10^6
Cs-138	1 x 10^1	1 x 10^4	Ta-182	1 x 10^1	1 x 10^4
Ba-131	1 x 10^2	1 x 10^6	W-181	1 x 10^3	1 x 10^7
Ba-140a	1 x 10^1	1 x 10^5	W-185	1 x 10^4	1 x 10^7
La-140	1 x 10^1	1 x 10^5	W-187	1 x 10^2	1 x 10^6
Ce-139	1 x 10^2	1 x 10^6	Re-186	1 x 10^3	1 x 10^6
Ce-141	1 x 10^2	1 x 10^7	Re-188	1 x 10^2	1 x 10^5
Os-185	1 x 10^1	1 x 10^6	Rn-222a	1 x 10^1	1 x 10^8
Os-191	1 x 10^2	1 x 10^7	Ra-223a	1 x 10^2	1 x 10^5
Os-191m	1 x 10^3	1 x 10^7	Ra-224[a]	1 x 10^1	1 x 10^5
Os-193	1 x 10^2	1 x 10^6	Ra-225	1 x 102	1 x 10^5
Ir-190	1 x 10^1	1 x 10^6	Ra-226a	1 x 10^1	1 x 10^4
Ir-192	1 x 10^1	1 x 10^4	Ra-227	1 x 10^2	1 x 10^6
Ir-194	1 x 10^2	1 x 10^5	Ra-228a	1 x 10^1	1 x 105
Pt-191	1 x 10^2	1 x 10^6	Ac-228	1 x 10^1	1 x 10^6
Pt-193m	1 x 10^3	1 x 10^7	Th-226a	1 x 10^3	1 x 10^7
Pt-197	1 x 10^3	1 x 10^6	Th-227	1 x 10^1	1 x 10^4
Pt-197m	1 x 10^2	1 x 10^6	Th-228a	1 x 10^0	1 x 10^4
Au-198	1 x 10^2	1 x 10^6	Th-229a	1 x 10^0	1 x 10^3
Au-199	1 x 10^2	1 x 10^6	Th-230	1 x 10^0	1 x 10^4
Hg-197	1 x 10^2	1 x 10^7	Th-231	1 x 10^3	1 x 10^7
Hg-197m	1 x 10^2	1 x 10^6	Th-natural	1 x 10^0	1 x 10^3
Hg-203	1 x 10^2	1 x 10^5	(include Th-223)		
Tℓ-200	1 x 10^1	1 x 10^6	Th-234a	1 x 10^3	1 x 10^5
Tℓ-201	1 x 10^2	1 x 10^6	Pa-230	1 x 10^1	1 x 10^6

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Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
Tℓ-202	1×10^2	1×10^6	Pa-231	1×10^0	1×10^3
Tℓ-204	1×10^4	1×10^4	Pa-233	1×10^2	1×10^7
Pb-203	1×10^2	1×10^6	U-230a	1×10^1	1×10^5
Pb-210a	1×10^1	1×10^4	U-231	1×10^2	1×10^7
Pb-212a	1×10^1	1×10^5	U-232a	1×10^0	1×10^3
Bi-206	1×10^1	1×10^5	U-233	1×10^1	1×10^4
Bi-207	1×10^1	1×10^6	U-234	1×10^1	1×10^4
Bi-210	1×10^3	1×10^6	U-235a	1×10^1	1×10^4
Bi-212a	1×10^1	1×10^5	U-236	1×10^1	1×10^4
Po-203	1×10^1	1×10^6	U-237	1 x 102	1×10^6
Po-205	1×10^1	1×10^6	U-238a	1×10^1	1×10^4
Po-207	1×10^1	1×10^6	U-natural	1 x 100	1×10^3
Po-210	1×10^1	1×10^4	U-239	1×10^2	1×10^6
At-211	1×10^3	1×1^{07}	U-240	1×10^3	1×10^7
Rn-220a	1×10^4	1×10^7	U-240a	1×10^1	1×10^6
Np-237a	1×10^0	1×10^3	Cm-244	1×10^1	1×10^4
Np-239	1×10^2	1×10^7	Cm-245	1 x 10	1×10^3
Np-240	1×10^1	1×10^6	Cm-246	1 x 10	1×10^3
Pu-234	1×10^2	1×10^7	Cm-247	1 x 10	1×10^4
Pu-235	1×10^2	1×10^7	Cm-248	1 x 10	1×10^3
Pu-236	1×10^1	1×10^4	Bk-249	1×10^3	1×10^6
Pu-237	1×10^3	1×10^7	Cf-246	1×10^3	1×10^6
Pu-238	1×10^0	1×10^4	Cf-248	1×10^1	1×10^4
Pu-239	1×10^0	1×10^4	Cf-249	1 x 10	1×10^3
Pu-240	1×10^0	1×10^3	Cf-250	1×10^1	1×10^4

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Nuclide	Activity Concentration (Bq/ g)	Activity (Bq)	Nuclide	Concentration Activity (Bq/ g)	Activity (Bq)
Pu-241	1 x 10^2	1 x 10^5	Cf-251	1 x 10	1 x 10^3
Pu-242	1 x 10^0	1 x 10^4	Cf-252	1 x 10^1	1 x 10^4
Pu-243	1 x 10^3	1 x 10^7	Cf-253	1 x 10^2	1 x 10^5
Pu-244	1 x 10^0	1 x 10^4	Cf-254	1 x 10	1 x 10^3
Am-241	1 x 10^0	1 x 10^4	Es-253	1 x 10^2	1 x 10^5
Am-242	1 x 10^3	1 x 10^6	Es-254	1 x 10^1	1 x 10^4
Am-242ma	1 x 10^0	1 x 10^4	Es-254m	1 x 10^2	1 x 10^6
Am-243a	1 x 10^0	1 x 10^3	Fm-254	1 x 10^4	1 x 10^7
Cm-242	1 x 10^2	1 x 10^5	Fm-255	1 x 10^3	1 x 10^6
Cm-243	1 x 10^0	1 x 10^4			

[a] Parent nuclides and their derivatives under equilibrium conditions are as follows:

Nuclides	
Parent	Derivatives
Sr-80	Rb-80
Sr-90	Y-90
Zr-93	Nb-93m
Zr-97	Nb-97
Ru-106	Rh-106
Ag-108m	Ag-108
Cs-137	Ba-137m

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Nuclides	
Parent	Derivatives
Ba-140	La-140
Ce-134	La-134
Ce-144	Pr-144
Pb-210	Bi-210, Po-210
Pb-212	Bi-212, Tℓ-208 (0.36), Po-212 (0.64)
Bi-212	Tℓ-208 (0.36), Po-212 (0.64)
Rn-220	Po-216
Rn-222	Po-218, Pb-214, Bi-214, Po-214
Ra-223	Rn-219, Po-215, Pb-211, Bi-211, Tℓ-207
Ra-224	Rn-220, Po-216, Pb-212, Bi-212, Tℓ-208 (0.36), Po-212 (0.64)
Ra-226	Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210
Ra-228	Ac-228
Th-226	Ra-222, Rn-218, Po-214
Th-228	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tℓ-208 (0.36), Po-212 (0.64)
Th-229	Ra-225, Ac-225, Fr-221, At-217, Bi-213, Po-213, Pb-209
Th-natural	Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tℓ-208 (0.36), Po-212 (0.64)
Th-234	Pa-234m
U-230	Th-226, Ra-222, Rn-218, Po-214
U-232	Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tℓ-208 (0.36), Po-212(0.64)
U-235	Th-231

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Nuclides	
Parent	Derivatives
U-238	Th-234, Pa-234m
U-natural	Th-234, Pa-234m, U-234, Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214,o-214, Pb-210, Bi-210, Po-210
U-240	Np-240m
Np-237	Pa-233
Am-242m	Am-242
Am-243	Np-239

PRESIDENT OF THE REPUBLIC OF INDONESIA

Signed

DR. SUSILO BAMBANG YUDHOYONO

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DEPUTY FOR STATE SECRETARY

ON REGULATIONS,

Signed

MUHAMMAD SAPTA MURTI