



HEAD OF THE NUCLEAR POWER SUPERVISORY AGENCY
REPUBLIC OF INDONESIA

REGULATION OF THE HEAD OF THE NUCLEAR POWER SUPERVISORY AGENCY
NUMBER 6 OF 2015
ABOUT
SAFETY OF RADIOACTIVE SOURCES

BY THE GRACE OF GOD ALMIGHTY

HEAD OF THE NUCLEAR ENERGY SUPERVISORY AGENCY,

Considering: a. that BAPETEN Head Regulation Number 7 of 2007

regarding the safety of radioactive sources is no longer appropriate again with the development of science and technology, and demanding international recommendations increasing security guarantees for radioactive sources;

b. that based on considerations as follows

referred to in letter a and to implement

provisions of Article 14 paragraph (2) Government Regulation Number 29 of 2008 concerning Licensing for Resource Utilization Ionizing Radiation and Nuclear Materials, and the provisions of Article 60 paragraph (4), Article 69 paragraph (2), Article 70 paragraph (4), and Article 76 Government Regulation Number 33 of 2007 concerning Ionizing Radiation Safety and Source Security Radioactive, needs to change the Agency Head Regulation Nuclear Energy Supervisor Number 7 of 2007 and stipulates Regulations for the Head of the Energy Supervisory Agency Nuclear on the Safety of Radioactive Sources;

- Remember :**
- 1. Law Number 10 of 1997 concerning
Nuclear Energy (State Gazette of the Republic of Indonesia
1997 Number 23, Supplement to the State Gazette
Republic of Indonesia Number 3676);**
 - 2. Government Regulation Number 33 of 2007 concerning
Ionizing Radiation Safety and Source Security
Radioactive (State Gazette of the Republic of Indonesia Year
2007 Number 74, Supplement to the State Gazette of the Republic
Indonesia Number 4370);**
 - 3. Government Regulation Number 29 of 2008 concerning
Licensing for the Use of Ionizing Radiation Sources and
Nuclear Materials (State Gazette of the Republic of Indonesia
2008 Number 54, Supplement to the State Gazette
Republic of Indonesia Number 4839);**

DECIDE:

**To stipulate: REGULATIONS ON THE HEAD OF THE NUCLEAR ENERGY SUPERVISORY AGENCY
CONCERNING SAFETY OF RADIOACTIVE SOURCES.**

PIG

GENERAL REQUIREMENTS

article 1

In this Regulation of the Head of the Nuclear Energy Supervisory Agency

What is meant by: 1.

Radioactive Source Security is an action that

carried out to prevent unauthorized access, tampering,

loss, theft, and/or unauthorized transfer

Radioactive Sources.

2. Radioactive sources are radioactive substances in solid form

which is permanently encased in a capsule

tied tightly.

3. Usage is all operational activities

Radioactive Sources include Source storage

Radioactive when not in operation.

- 4. The next Nuclear Energy Regulatory Agency**
abbreviated as BAPETEN is the agency tasked with carrying out supervision through regulations, permits, and inspection of all utilization activities
Nuclear Power.
- 5. Permit Holder is a person or entity that has**
received permission to utilize nuclear energy from BAPETEN.
- 6. Inventory is the activity of recording all Radioactive Sources**
through identification and physical examination of each
Radioactive Source owned.
- 7. Sabotage is an act that is deliberately carried out**
against Radioactive Sources during Use,
storage, or transportation of radioactive sources
resulting in radiation exposure or release of substances
radioactive so directly or indirectly
can endanger the safety of personnel and the public
or environment.
- 8. Radioactive Source Security Officers are officers**
appointed by the License Holder and declared capable
carry out related work
Radioactive Source Safety by BAPETEN.
- 9. Fixed Facilities are Source rooms or locations**
Fixed radioactivity.
- 10. Transport of Radioactive Sources is transfer**
Radioactive sources from one place to another
over the general traffic network by using
means of land, water or air transportation.

Section 2

This BAPETEN Chairman's Regulation regulates provisions regarding:

- a. Radioactive Source category and Security level**
Radioactive Sources;
- b. permit requirements and approval requirements;**
- c. Radioactive Source Security efforts; And**
- d. recordings and reports.**

Article 3

The provisions as intended in Article 2 letters a to d apply to activities:

- a. export;
- b. import;
- c. Uses include:
 - 1. irradiator;
 - 2. radiotherapy;
 - 3. industrial radiography;
 - 4. industrial gauging with high activity radioactive substances;
 - 5. well logging; And
 - 6. photofluorography;
- d. radioisotope production;
- e. radioactive waste management; And
- f. Transport of Radioactive Sources.

CHAPTER II

RADIOACTIVE SOURCE CATEGORIES AND SAFETY LEVEL OF RADIOACTIVE SOURCES

Article 4

Radioactive sources for export, import, use, radioisotope production, radioactive waste management and Transportation of Radioactive Sources as intended in Article 3 is categorized into:

- a. Category 1 Radioactive Source;
- b. Category 2 Radioactive Source;
- c. Category 3 Radioactive Source;
- d. Category 4 Radioactive Source; And
- e. Category 5 Radioactive Source.

Article 5

(1) Security level for export, import,

Use, production of radioisotopes and waste management radioactive as intended in Article 3 letter a up to the letter e are grouped into:

a. level...

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- a. security level A;
- b. security level B; And
- c. security level C.

(2) Security level for Source Transportation activities

**Radioactive as intended in Article 3 letter f
grouped into:**

- a. basic security level;
- b. advanced level of security; And
- c. advanced level of security tightened.

Article 6

**The relationship between activities as referred to in
Article 3, Radioactive Source category as intended
in Article 4, and the level of Security of Radioactive Sources
as intended in Article 5 stated in
Appendix I which is an inseparable part of
Regulations of the Head of BAPETEN.**

CHAPTER III

PERMIT REQUIREMENTS AND APPROVAL REQUIREMENTS

Part One

General

Article 7

- (1) Every person or body that will carry out
utilization of Radioactive Sources for activities
as intended in Article 3 letters a to
with letter e is required to have a power utilization permit
nuclear from the Head of BAPETEN by fulfilling
Radioactive Source Safety requirements and radiation safety
requirements.**
- (2) Radioactive Source Safety Requirements as follows
referred to in paragraph (1) is carried out through fulfillment
Radioactive Source Security documents and efforts
Radioactive Source Safety.**

(3) provisions...

- (3) Provisions regarding radiation safety requirements as intended in paragraph (1) is regulated in a separate BAPETEN Chairman's regulation.**

**The second part
Permit Requirements**

Article 8

- (1) To obtain a permit to utilize nuclear energy as intended in Article 7 paragraph (1) the applicant must submit the request in writing to Head of BAPETEN by filling in the form and completing it Radioactive Source Safety document as referred to in Article 7 paragraph (2).**
- (2) Radioactive Source Security Documents as follows referred to in paragraph (1) for security level A, security level B, and security level C in activities as intended in Article 3 letter a up to letter e includes:**
- a. proof of completion of Security Officer training Radioactive Sources;**
 - b. Radioactive Source Security program documents;
And**
 - c. Radioactive Source Safety verification report.**

Article 9

- (1) Radioactive Source Security program documents as intended in Article 8 paragraph (2) letter b contains, among other things:**
- a. Radioactive Source description, design and floor plan facilities, equipment data Source Security Radioactive, and the surrounding environment;**
 - b. Radioactive Source Security organization;**
 - c. Radioactive Source Security operational procedures;**
 - d. training;**
 - e. Inventory and recording of inventory results;**

- f. Emergency handling procedures
Radioactive Source Safety; And
- g. reporting.

(2) Radioactive Source Security Program as per referred to in paragraph (1) is prepared according to the format listed in Appendix II which is an inseparable part of the BAPETEN Head Regulations This.

Article 10

Radioactive Source Safety verification report as per as intended in Article 8 paragraph (2) letter c at least contains:

a. threat level assessment:

1. determination of potential threats; And
2. analysis of *vulnerabilities assessment*) Radioactive

Sources. b. performance assessment:

1. Radioactive Source Security organization;
2. Radioactive Source Security operational procedures;
And
3. Radioactive Source Security equipment.

Part Three

Consent Requirements

Article 11

Approval requirements as intended in Article 2 letter b applies to activities:

- a. export of Category 1 Radioactive Sources and/or Sources Radioactive category 2; And
- b. import Category 1 Radioactive Sources and/or Sources Radioactive category 2.

Article 12

- (1) To obtain export approval for category 1 Radioactive Sources and/or category 2 Radioactive Sources as intended in Article 11 letter a Holder Permits must meet export approval requirements as stipulated in government regulations regarding Licensing for the Use of Ionizing Radiation Sources and obtain export approval from the Head of BAPETEN no later than 7 (seven) days before delivery.
- (2) To obtain export approval from the Head BAPETEN as intended in paragraph (1) The Permit Holder must submit:
- a. written notification (*notification*) to the agency authorities in the importing country no later than 7 (seven) days before delivery regarding:
 1. export date;
 2. mode of transportation;
 3. recipient;
 4. name and activity of the Radioactive Source;
 5. total activity level; And
 6. number and serial number of Radioactive Sources; And
 - b. proof of authorization from the agency authorized in the importing country.
- (3) In terms of exporting Radioactive Sources category 1, apart from fulfilling the provisions as intended in paragraph (2), the exporter must submit written approval (*consent*) obtained by the importer importing country from the competent authority in importing country.

Article 13

- (1) To obtain approval to import Category 1 Radioactive Sources and/or Category 2 Radioactive Sources as intended in Article 11 letter b Holder Permits must meet import approval requirements as stipulated in government regulations regarding Licensing for the Use of Ionizing Radiation Sources

And...

and received import approval from the Head of BAPETEN no later than 7 (seven) days before delivery.

(2) To obtain import approval from the Head BAPETEN as intended in paragraph (1)

The Permit Holder must submit:

- a. proof of authorization *from* the agency authorized in the exporting country; And
- b. proof that the user as recipient of the Radioactive Source has received permission to use nuclear energy from the Head of BAPETEN beforehand carrying out imports.

(3) In the case of importing Radioactive Sources

category 1, apart from meeting the provisions as follows as intended in paragraph (2) the importer must submit written approval (*consent*) obtained by the exporter exporting country from the competent authority in exporting country.

CHAPTER IV

RADIOACTIVE SOURCE SAFETY MEASURES

Part One

General

Article 14

Radioactive Source Security Efforts as intended in Article 7 paragraph (2) includes:

- a. Radioactive Source Security efforts for activities export, import, Use, production of radioisotopes, And radioactive waste management; And
- b. Radioactive Source Security efforts for activities Transport of Radioactive Sources.

The second part
Radioactive Source Security Efforts for Export Activities,
Import, Use, Production of Radioisotopes, and Management
Radioactive Waste

Article 15

1. Radioactive Source Security Efforts for activities

Export, import, use, production of radioisotopes and management of radioactive waste as intended in Article 14 letter a must fulfill the functions:

- a. prevention;**
- b. detection;**
- c. delay; And**
- d. response.**

Paragraph 1

Prevention Function

Article 16

(1) Compliance with Radioactive Source Security Efforts

preventive function as intended in Article 15 letters a include:

- a. Radioactive Source Security organization;**
- b. training;**
- c. background checks;**
- d. information security system; And**
- e. access control.**

(2) Compliance with Radioactive Source Security Efforts

prevention function as intended in paragraph (1) applicable to security level A, security level B, and security level C.

Article 17

(1) Radioactive Source Security Organization as

referred to in Article 16 paragraph (1) letter a at least consist of:

- a. Permit Holder; And
- b. Radioactive Source Safety Officer.

(2) Radioactive Source Security Officer as per referred to in paragraph (1) letter b can be concurrently executed by Radiation Protection Officer (PPR) or unit head facility security.

Article 18

- (1) Radioactive Source Security Organization as referred to in Article 17 must be in accordance with:
- a. Radioactive Source Security level;
 - b. number of Radioactive Sources; And
 - c. potential threat to Radioactive Sources.
- (2) Radioactive Source Security Organization as referred to in paragraph (1) can be integrated with facility security organization.

Article 19

Permit Holder as intended in Article 17 paragraph (1)

Letter a has duties and responsibilities:

- a. compose, develop, update and implementing the Radioactive Source Security program;
- b. compose, develop and update Radioactive Source Safety verification report;
- c. developing a security culture; d. Guarantee Radioactive Source Safety equipment works fine;
- e. guarantee and ensure the availability of personnel, Radioactive Source Safety procedures and equipment; And
- f. provides Radioactive Source Safety training for personnel involved in such activities referred to in Article 3.

Article 20

Radioactive Source Security Officers as referred to in Article 17 paragraph (1) letter b have duties and responsibilities as follows:

- a. provide advice to relevant License Holders
with Radioactive Source Security efforts;
- b. assist Permit Holders in developing programs
Radioactive Source Safety and verification report
Radioactive Source Safety;
- c. assist the License Holder to ensure compliance
Radioactive Source Security requirements increase
security at the facility and Radioactive Sources if they occur
increased threats to security;
- d. provide training or provide instructions and
information about Internal Radioactive Source Security
facilities to other personnel and other people who have
access to Radioactive Sources, facilitated by
Permit Holder;
- e. carry out an inventory of radioactive sources
periodic; And
- f. report to the License Holder every:
 1. There is damage to security facilities or equipment
to be repaired or replaced; and/or
 2. events related to potential disruption or
threats to security, and emergencies
Radioactive Source Safety.

Article 21

- (1) Radioactive Source Security Officer as follows
referred to in Article 17 paragraph (1) letter b must have
proof of completion of Source Security Officer training
Radioactive.
- (2) To obtain proof of completion of training
as intended in paragraph (1), Officer candidates
Radioactive Source Safety must:
 - a. attend Radioactive Source Safety training;
And

b. pass the Radioactive Source Safety training exam.

Article 22

- (1) Radioactive Source Safety Training as follows
as intended in Article 21 paragraph (2) letter a is held
by the Radioactive Source Security training institute.
- (2) Radioactive Source Safety training institute
as intended in paragraph (1) can come from government
agencies or legal entities that have been accredited by the
authorized institution for
organize training according to the scope of accreditation.
- (3) In the event that a Security training institution is not yet available
Accredited Radioactive Sources then Head
BAPETEN can:
 - a. appoint training institutions
Safety of Radioactive Sources as
referred to in paragraph (2); or
 - b. organize Source Security training
Radioactive.
- (4) Provisions regarding the appointment of training institutions
Safety of Radioactive Sources as referred to in
paragraph (3) letter a is regulated in the BAPETEN Chairman's regulations
separately.

Article 23

Radioactive Source Safety training exam as per
referred to in Article 21 paragraph (2) letter b is organized by
Head of BAPETEN.

Article 24

Security culture as intended in Article 19
letter c includes:

- a. commitment to considerate performance
security aspects at all levels of management;
- b. implementation of security culture in the organizational structure
capable of doing;
- c. allocation of financial resources, equipment, facilities

And...

and sufficient personnel to implement security;

And

d. ability to communicate Security programs

Radioactive Sources consistently and thoroughly in organization.

Article 25

(1) Training as intended in Article 16 paragraph (1)

letter b must be held by the License Holder.

(2) The training as intended in paragraph (1) must contain at least:

a. introduction of Radioactive Source Safety culture;

b. duties of each personnel in Source Security

Radioactive;

c. function and operation of Security equipment

Radioactive Sources; And

d. handling security emergencies

Radioactive Sources.

Article 26

Background checks as referred to in

Article 16 paragraph (1) letter c aims to:

a. assessing honesty;

b. determine access authority to Radioactive Sources; And

c. identify unwanted behavior.

Article 27

Background checks as referred to in

Article 26 applies to:

a. Radioactive Source Security Officer;

b. personnel in accordance with the activities as intended in Article 3; And

c. people who have access to Radioactive Sources, among other:

1. janitor;

2. facility security officers;

3. driver;

4. officer...

4. Source loading and unloading officer
Radioactive; And
5. visitors.

Article 28

(1) Background check on Security Officers

**Radioactive Sources and personnel as intended
in Article 27 letters a and b are implemented through:**

- a. document inspection; And
- b. interview.

(2) Examination of documents as intended in paragraph

(1) letter a at least includes:

- a. Identity card;
- b. family card;
- c. birth certificate or similar;
- d. police certificate; And
- e. certificate from previous place of work, if
previously worked.

(3) Interview as intended in paragraph (1) letter b

includes at least:

- a. work experience;
- b. financial condition; And
- c. family background and conditions.

Article 29

**Background check on the person who has
access to Radioactive Sources as referred to in
Article 27 letter c must be implemented through inspection
Identity card.**

Article 30

**(1) Background checks are carried out periodically and
anytime.**

**(2) Periodic background checks as per
referred to in paragraph (1) shall be carried out at least 1 (one)
times in 1 (one) year.**

(3) Background checks at any time

as intended in paragraph (1) is carried out if:

- a. there are indications of internal or external threats on the Security of Radioactive Sources; or
- b. the occurrence of radioactive source security disturbances.

Article 31

(1) License Holders must implement an information security system as intended in Article 16 paragraph (1) letter d.

(2) Information security system as referred to in paragraph (1) must ensure:

a. confidentiality of information regarding the location of the Source Radioactive, Radioactive Source Safety program, and Radioactive Source Safety verification report;
And

b. Confidential information received from the License Holder is not handed over to other parties without approval from the first party.

(3) Information security system as referred to in paragraph (1) is determined at least based on:

- a. activity and number of Radioactive Sources; And
- b. potential threat to Radioactive Sources.

Article 32

(1) Permit Holders must implement access controls as intended in Article 16 paragraph (1) letter e.

(2) Access control as intended in paragraph (1) includes:

- a. procedures for granting entry permits;
- b. providing identification;
- c. making records of leaving and entering the facility; d. making pickup and return records Radioactive sources from storage areas; And
- e. escort procedures.

- (3) Access control for Radioactive Sources by level security A and security level B apply the provisions as intended in paragraph (2).**
- (4) Access control for Radioactive Sources by level security C applies the provisions as intended in paragraph (2) letters a to d.**
- (5) Escort procedures as intended in paragraph (2) letter e applies to people who have access to Radioactive Sources as intended in Article 27 letter c.**

Paragraph 2

Detection Function

Article 33

- (1) Radioactive Source Security Efforts that fulfill the detection function as intended in Article 15 letter b includes:
 - a. detection equipment; And**
 - b. continuous monitoring by officers facility security.****
- (2) Compliance with Radioactive Source Security Efforts detection function as intended in paragraph (1) applicable to security level A, security level B, and security level C.**

Article 34

- (1) Detection equipment as intended in Article 33 paragraph (1) letter a for:
 - a. security level A, includes:
 - 1. *handy talky*;**
 - 2. fixed telephones and cellular telephones;**
 - 3. alarm with siren;**
 - 4. motion detector;**
 - 5. *closed circuit television (CCTV)*;**
 - 6. infrared sensor; And**
 - 7. *balance magnetic switch*;******

b. security level B, includes:

1. *handy talky*; 2.

fixed telephone or cellular telephone;

3. alarm with siren; danx

4. *closed circuit television (CCTV)*;

c. security level C, includes:

1. fixed telephone or cellular telephone; And

2. alarm with siren;

(2) The number of detection equipment as intended in paragraph

(1) letters a, b and c is adjusted accordingly

facilities, and number of Source Security Officers

Radioactive and facility security units.

Article 35

Alarm with siren and *closed circuit television (CCTV)*

as intended in Article 34 paragraph (1) letter b number 3 and number

4 for industrial radiography activities installed in storage facilities.

Paragraph 3

Delay Function

Article 36

(1) Compliance with Radioactive Source Security Efforts

delay function as intended in Article 15

letter c includes:

a. Radioactive Source facilities;

b. key control; And

c. delay equipment.

(2) Compliance with Radioactive Source Security Efforts

delay function as intended in paragraph (1)

applies to security level A, security level B, and security level

C.

Article 37

Radioactive Source Facilities as referred to in Article 36 paragraph (1) letter a includes:

- a. Fixed Facilities; and/or**
- b. storage facilities.**

Article 38

(1) Radioactive Source Facilities as referred to in Article 37 must:

- a. using materials that are strong and not easy vandalized; And**
- b. designed without windows.**

(2) Storage facilities as intended in Article 37 letter b which is in the open, apart from fulfilling requirements as intended in paragraph (1), as well must be equipped with a fence.

Article 39

(1) Key controls as intended in Article 36 paragraph (1) letter b is implemented by:

- a. create and maintain usage records, storage, and key checking, among others includes:
 - 1. name of personnel;**
 - 2. implementation date; 3. implementation time; And**
 - 4. signature;****
- b. check the presence of keys periodically, to avoid copying attempts;**
- c. assign 2 (two) personnel to store and use 1 (one) manual key each different ones and used simultaneously when opening and closing facilities; And**
- d. change the Personal Identification Number combination (PIN) or electronic key password periodically or if there are authorized personnel**

stopped from accessing the facility.

- (2) Key controls for Radioactive Sources with security level A apply to the provisions as intended in paragraph (1).**
- (3) Key control for Radioactive Sources with levels security B and security level C provisions apply as intended in paragraph (1) letters a and b.**

Article 40

Delay equipment as intended in Article 36 paragraph (1) letter c for:

- a. Security level A includes at least:
 - 1. 1 (one) electronic key; And**
 - 2. 2 (two) manual keys;****
- b. Security level B includes at least 1 (one) key manual installed at the entrance to the Fixed Facility or storage facilities;**
- c. Security level C includes at least 1 (one) key manual installed on the gate leading to or Fixed Facility entrances, and storage facilities.**

Paragraph 4

Response Function

Article 41

- (1) Compliance with Radioactive Source Security Efforts response function as intended in Article 15 letter d includes:
 - a. equipment that fulfills the response function; And**
 - b. handling security emergencies Radioactive Sources.****
- (2) Radioactive Source Security Efforts that fulfill the response function as intended in paragraph (1) applicable to security level A, security level B, and security level C.**

Article 42

- (1) Equipment that fulfills the response function as follows referred to in Article 41 paragraph (1) letter a for:
- a. Security level A includes:
 - 1. *handy talky*;
 - 2. fixed telephones and cellular telephones; And
 - 3. flashlight with a voltage of at least 6 (six) volts;
 - b. security level B includes:
 - 1. *handy talky*; 2. fixed telephone or cellular telephone; And
 - 3. flashlight with a voltage of at least 6 (six) volts;
 - c. Security level C includes:
 - 1. fixed telephone or cellular telephone; And
 - 2. The flashlight has a voltage of at least 6 (six) volts.
- (2) The number of equipment that fulfills the response function as intended in paragraph (1) letters a, b, and c are adjusted to the number of officers
Radioactive Source Security and security units facility.

Article 43

- (1) Management of Source Security emergencies
Radioactive as intended in Article 41 paragraph (1) letter b must be carried out in accordance with the procedure handling emergencies Source Security Radioactive.
- (2) Security emergency response procedures
Radioactive Sources is part of the program
Radioactive Source Safety.

Article 44

- Security emergency response procedures
Radioactive Sources as intended in Article 43 paragraph (1) includes at least:
- a. incident identification;

- b. determining the responsibilities of each personnel;**
- c. Estimated impact of the Source Security emergency
Radioactive;**
- d. determination actions to deal with the situation
Radioactive Source Security Emergency;**
- e. election equipment for carry out
Source Security emergency procedures
Radioactive;**
- f. establishing communication mechanisms between personnel
and the police;**
- g. Security emergency response training
Radioactive Sources; And**
- h. recording and reporting.**

Article 45

- Radioactive Source Safety Emergency as referred to in Article 43 paragraph (1) includes:
- a. unauthorized access to Radioactive Sources;**
 - b. destruction of facilities;**
 - c. loss of Radioactive Source;**
 - d. theft or sabotage of radioactive sources;**
 - e. unauthorized transfer of Radioactive Sources;**
 - f. increasing threats that have an impact
significant to the Security of Radioactive Sources or
facility; And**
 - g. Radioactive Source Transport accident.**

Article 46

To overcome the increasing threats that exist significant impact on Radioactive Source Security or facilities as intended in Article 45 letter f

The Permit Holder must:

- a. placing the Radioactive Source in a container and
stored in a storage facility if the Source is Radioactive
not operated;**
- b. increase monitoring of facilities by Officers
Radioactive Source Safety; And**

- c. improve communication and coordination with parties nearest police force.**

Part Three

Radioactive Source Security Efforts for Activities Transport of Radioactive Sources

Article 47

- (1) Permit holders are required to make security efforts Radioactive Sources for Source Transport activities Radioactive as intended in Article 14 letter b in accordance with the security level as referred to in Article 5 paragraph (2).**
- (2) Radioactive Source Security Efforts for activities Transportation of Radioactive Sources as intended in paragraph (1) must fulfill the functions: a. prevention;
b. detection;
c. delay; And
d. response.**
- (3) Radioactive Source security measures for activities Transportation of Radioactive Sources as intended in paragraph (2) must be included in the security plan for Radioactive Source Transport activities.**

Article 48

- (1) Security measures that fulfill a preventive function as intended in Article 47 paragraph (2) letter a includes:**
- a. preliminary notification to recipients;
b. preliminary notification to the Head
BAPETEN
c. identification of transport personnel;
d. selecting the mode of transportation of radioactive sources;
e. determining the route for transporting radioactive sources;
And**

f. determining stopping and transit places.

(2) Security measures that fulfill the preventive function for the basic security level as intended

In Article 5 paragraph (2) letter a the provisions apply as intended in paragraph (1) letter a, letter c, letter d, and letter f.

(3) Security measures that fulfill a preventive function

for advanced security levels and advanced security levels are tightened as intended in Article 5 paragraph (2) letters b and letter c, provisions apply as intended in paragraph (1) letters a to with the letter f.

Article 49

Preliminary notification as referred to in

Article 48 paragraph (1) letters a and b contain at least:

- a. delivery plan;
- b. mode of transportation of radioactive sources; And
- c. estimated time of arrival.

Article 50

(1) The sender must carry out route determination

Transportation of Radioactive Sources as intended in Article 48 paragraph (1) letter e includes:

- a. main routes; And
- b. alternative route.

(2) Determining the route for transporting radioactive sources

as intended in paragraph (1) must be planned to avoid areas prone to natural disasters, vulnerable riots, prone to threats, theft and sabotage.

Article 51

(1) Determination of stopping and transit places

as intended in Article 48 paragraph (1) letter f must consider the security conditions of the location and ease of supervision.

- (2) While at the stop and transit place as stated referred to in paragraph (1) Radioactive sources must be in a locked and monitored vehicle continuously by the Source Security Officer Radioactive.**

Article 52

- (1) Security measures that fulfill the detection function as intended in Article 47 paragraph (2) letter b include:**
- a. inspection of transport vehicles;**
 - b. use of security communication systems; And**
 - c. use of tracking equipment (*tracking system*).**
- (2) Security measures that fulfill the detection function for basic security level as referred to in Article 5 paragraph (2) letter a applies the provisions as intended in paragraph (1) letter a.**
- (3) Security measures that fulfill the detection function for advanced security level and security level continuation is tightened as intended in Article 5 paragraph (2) letters b and c apply the provisions as intended in paragraph (1).**

Article 53

- (1) Security measures that fulfill the delay function as intended in Article 47 paragraph (2) letter c includes:**
- a. use of locks and seals; And**
 - b. implementation of the transfer.**
- (2) Security measures that fulfill a delay function for the basic security level as intended In Article 5 paragraph (2) letter a, the provisions as intended in paragraph (1) letter a apply.**
- (3) Security measures that fulfill a delay function for advanced security levels and security levels continuation is tightened as intended in Article 5**

paragraph (2) letters b and c apply the provisions as intended in paragraph (1).

Article 54

- (1) Security measures that fulfill the response function as intended in Article 47 paragraph (2) letter d includes:
 - a. dealing with internal security emergencies
Transport of Radioactive Sources;
 - b. internal reporting condition routine or emergency conditions;
 - c. appointment of a Radioactive Source Security Officer;
And
 - d. coordination with the Indonesian National Police.
- (2) Security measures that fulfill the response function for basic security level as referred to in Article 5 paragraph (2) letter a applies the provisions as intended in paragraph (1) letters a and letter b.
- (3) Security measures that fulfill the response function for advanced level of security as intended in Article 5 paragraph (2) letter b applies the provisions as follows referred to in paragraph (1) letters a, b and c.
- (4) Security measures that fulfill the response function for Advanced security levels are tightened as is as intended in Article 5 paragraph (2) letter c, the provisions as intended in paragraph (1) apply.

Article 55

- (1) Security plan for Transportation activities Radioactive Sources as intended in Article 47 paragraph (3) contains at least:
 - a. description of the Radioactive Source, type of packaging, and mode of Transport of the Radioactive Source;
 - b. description of transport personnel;
 - c. determining the responsibilities of each personnel;
 - d. list of Radioactive Source Safety equipment and communications equipment;
 - e. description...

- e. description of Radioactive Source Transport routes;
- f. personnel training;
- g. transit procedures, temporary storage,
transfer and demolition;
- h. reporting procedures under routine conditions and circumstances
emergency;
- i. Inventory and recording of inventory results
Transported radioactive sources; And
- j. security emergency response plan procedures for Resource
Transportation activities
Radioactive.

(2) Security plan for transportation activities

Radioactive Sources as intended in paragraph (1)
may be part of the Source Security Program
Radioactive as intended in Article 9.

CHAPTER V

RECORDS AND REPORTS

Article 56

Permit holders must create, maintain, renew
recording and submitting reports:

- a. implementation of the Radioactive Source Security program;
- b. implementation of Radioactive Source Security verification; And
- c. Radioactive Source Safety emergency.

Article 57

Records and reports on the implementation of the Security Program
Radioactive Sources as intended in Article 56

letter a includes:

- a. recording and reporting of activity implementation; And
- b. Source Security training recordings and reports
Radioactive internally and externally
done.

Article 58

**Records and reports of Security verification implementation
Radioactive Sources as intended in Article 56**

letter b includes:

- a. results of assessing the level of threats that exist in and on
around facilities; And**
- b. results of organizational performance assessments, procedures, and
Radioactive Source Safety equipment.**

Article 59

**Source Security emergency recordings and reports
Radioactive as intended in Article 56 letter c**

includes:

- a. the results of identification and handling of access are not
valid for Radioactive Sources;**
- b. results of identification and treatment of
destruction of facilities;**
- c. results of the search for Radioactive Sources
is lost;**
- d. results of countering theft or sabotage against
Radioactive Sources;**
- e. the results of dealing with the consequences of illegal transfer
Radioactive Sources;**
- f. results of identification and handling of improvements
threats that have a significant impact on
Security of Radioactive Sources or facilities; and/or**
- g. results of handling Source Transportation accidents
Radioactive.**

Article 60

**Report as intended in Article 57 and Article 58
submitted at least 1 (one) time in 1 (one) year.**

Article 61

(1) A Radioactive Source Security emergency report as intended in Article 59 is submitted

in a way:

- a. oral; And**
- b. written.**

(2) Oral report as intended in paragraph (1) letter

a must be submitted to the Head of BAPETEN in person directly or by telephone no later than 1 (one) hour from the incident.

(3) Written report as intended in paragraph (1)

letter b must be submitted by the Permit Holder to Head of BAPETEN no later than 3 (three) days from date since the emergency occurred.

(4) Written report as intended in paragraph (1)

letter b contains at least:

- a. causes of emergency situations;**
- b. chronology; And**
- c. the impact caused.**

Article 62

(1) Apart from the written report as intended in

Article 61 paragraph (3) Permit holders must also submit written report regarding the results of identification and handling emergencies Source Security Radioactive to the Head of BAPETEN no later than 30 (three thirty) days from the date of the incident.

(2) Written report as intended in paragraph (1)

contains at least:

- a. implementation of emergency management Radioactive Source Security, including:**
 - 1. personnel; And**
 - 2. equipment.**
- b. actions taken to secure Radioactive Sources; And**

c. the impact caused.

Article 63

**In the event of an emergency or event
have significant consequences for security
Radioactive Sources for Source Transport activities
Radioactive, the sender must submit a report to
Head of BAPETEN and the nearest police as soon as possible.**

CHAPTER VI

CLOSING

Article 64

**When this BAPETEN Head Regulation comes into force,
BAPETEN Head Regulation Number 7 of 2007 concerning
Radioactive Source Safety is revoked and stated no
applies.**

Article 65

**This BAPETEN Head Regulation comes into force on the date
invited.**

**So that everyone knows, ordered
promulgation of this BAPETEN Chairman's Regulation with its
placement in the State Gazette of the Republic of Indonesia.**

**Set in Jakarta
on April 8, 2015**

HEAD OF THE NUCLEAR ENERGY SUPERVISORY AGENCY,

JAZI EKO ISTIYANTO

**Promulgated in Jakarta
on April 29, 2015**

**MINISTER OF LAW AND HUMAN RIGHTS
REPUBLIC OF INDONESIA,**

YASONNA H. LAOLY

STATE NEWS OF THE REPUBLIC OF INDONESIA 2015 NUMBER 654

ATTACHMENT

REGULATION OF THE HEAD OF THE NUCLEAR POWER SUPERVISORY AGENCY

NUMBER 6 OF 2015

ABOUT

SAFETY OF RADIOACTIVE SOURCES

A. RADIOACTIVE SOURCE CATEGORIES AND SOURCE SAFETY LEVEL

RADIOACTIVE

For Export, Import, Use, Production and Radioisotope Activities

Radioactive Waste Management

Category Source Radioactive	A/D ratio (activity/D value)	Level Security	Activity
1	A/D \leq 1000	Level Security A	1. export and import: <ul style="list-style-type: none"> a. Radioactive Source for irradiator b. Radioactive Source for radiotherapy type of therapy external 2. Usage: <ul style="list-style-type: none"> a. irradiator b. radiotherapy type of therapy external 3. radioisotope production 4. management of radioactive waste

Category Source Radioactive	A/D ratio (activity/D value)	Level Security	Activity
2	$1000 > A/D \geq 10$	Level B Security	<p>1. export and import:</p> <ul style="list-style-type: none"> a. Radioactive Source for industrial radiography b. Radioactive Source for radiotherapy type brachytherapy <p>2. Usage:</p> <ul style="list-style-type: none"> a. industrial radiography b. radiotherapy type brachytherapy <p>3. Storage*</p> <p>Radioactive Source for well logging, and industrial gauging with Radioactive Sources high activity with numbers at least 10 (ten) Radioactive Sources.</p>
3	$10 > A/D \geq 1$	Level C Security	<p>Use:</p> <ul style="list-style-type: none"> a. industrial gauging with Source of Radioactive activity high (Cs-137, Co-60, and Am-241Be with a range of activities between 0.4 MBq - 40 GBq) b. well logging c. autofluorography
4	$1 > A/D \geq 0.01$	Enough fulfil condition safety Source Radioactive	<p>Use:</p> <p>industrial gauging with Source Low activity radioactivity (Pm-147, Tl-204, Kr-85, Sr-90, Am-241, Fe-55, Cd-109, Ni-63, with activity range between 0.4 MBq- 40 GBq)</p>

Category Source Radioactive	A/D ratio (activity/D value)	Level Security	Activity
5	0.01 > A/D And A > level exception	Enough fulfil condition safety Source Radioactive	Use: a. Radioactive Source for educational, research and development purposes b. <i>check-sources</i> c. Radioactive Source for calibration d. Radioactive Source for e. standardization

Notes:

* Storage: is part of *well logging activities* , and

industrial gauging with high activity Radioactive Sources

B. RADIOACTIVE SOURCE CATEGORIES AND SOURCE SAFETY LEVEL**RADIOACTIVE****For Radioactive Source Transport Activities**

Category Source Radioactive	A/D ratio (activity/D value)	Level Security Transportation Source Radioactive	Transportation Activities Radioactive Sources
1	$A/D \leq 1000$	Security Level continued tightening	a. Radioactive Source for irradiator b. Source Radioactive for this type of radiotherapy external therapy
2	$1000 > A/D \leq 10$	Advanced Security Level	a. Radioactive Source for industrial radiography b. Radioactive Source for type brachytherapy radiotherapy

Category Source Radioactive	A/D ratio (activity/D value)	Level Security Transportation Source Radioactive	Transportation Activities Radioactive Sources
3	$10 > A/D \geq 1$	Security Level base	<p>a. Radioactive Source for industrial gauging with Source Radioactive high activity (Cs-137, Co-60, and Am-241Be with a range of activities between 0.4 MBq - 40 GBq)</p> <p>b. Radioactive Source for <i>well logging</i></p> <p>c. Radioactive Source for photofluorography</p>
4	$1 > A/D \geq 0.01$	Quite fulfilling condition safety Radioactive Sources	<p>industrial gauging with Source of Radioactive activity low (Pm-147, Tl-204, Kr-85, Sr-90, Am-241, Fe-55, Cd-109, Ni-63, with activity range between 0.4 MBq-40 GBq)</p>

Category Source Radioactive	A/D ratio (activity/D value)	Level Security Transportation Source Radioactive	Transportation Activities Radioactive Sources
5	0.01 > A/D And A > level exception	Quite fulfilling condition safety Radioactive Sources	<p>a. Radioactive Source for objective education, study And development</p> <p>b. <i>check-sources</i></p> <p>c. Source Radioactive for calibration</p> <p>d. Source Radioactive For</p> <p>e. standardization</p>

HEAD OF THE NUCLEAR ENERGY SUPERVISORY AGENCY,

JAZI EKO ISTIYANTO

APPENDIX II
REGULATION OF THE HEAD OF THE NUCLEAR POWER SUPERVISORY AGENCY
NUMBER 6 OF 2015
ABOUT
SAFETY OF RADIOACTIVE SOURCES

RADIOACTIVE SOURCE SAFETY PROGRAM

PIG	INTRODUCTION
	1.1 Background
	1.2 Objectives
	1.3 Scope
CHAPTER II	DESCRIPTION OF RADIOACTIVE SOURCES, FACILITIES, EQUIPMENT AND SURROUNDING ENVIRONMENT
	1.1 Description of Radioactive Sources
	1.2 Description of Radioactive Sources
	1.3 Facility Design and Plan
	1.4 Radioactive Source Safety Equipment Data
	1.5 Description of the Surrounding Environment
CHAPTER III	ORGANIZATION OF RADIOACTIVE SOURCE SAFETY
	3.1 Organizational Structure
	3.2 License Holder Responsibilities
	3.3 Responsibilities of Radioactive Source Safety Officers
CHAPTER IV	OPERATIONAL PROCEDURES FOR RADIOACTIVE SOURCE SAFETY
	IN USE, EXPORT, IMPORT AND TRANSPORTATION
	RADIOACTIVE SOURCES
	4.1 Usage Procedures
	4.2 Export Procedures (for exporters)
	4.3 Import Procedure (for porters)
	4.4 Security plan for Resource Transport activities
	Radioactive (if there is a Radioactive Source Transport activity)
CHAPTER V	TRAINING
CHAPTER VI	INVENTORY AND RECORDING OF INVENTORY RESULTS

CHAPTER VII MANAGEMENT OF RESOURCE SECURITY EMERGENCIES

RADIOACTIVE

1.1 Security emergency response procedures

Radioactive Sources

1.2 Procedures for dealing with security emergencies for

Radioactive Source Transport activities

CHAPTER VIII REPORTING

HEAD OF THE NUCLEAR ENERGY SUPERVISORY AGENCY,

JAZI EKO ISTIYANTO