

**GENERAL**  
=====

PRESIDENT OF THE REPUBLIC OF INDONESIA

**GOVERNMENT REGULATION**  
**NO. 63 OF 2000 ; DATED AUGUST 21, 2000**

**R E**

**SAFETY AND HEALTH AGAINST UTILIZATION  
OF IONIZING RADIATION**

THE PRESIDENT OF THE REPUBLIC OF INDONESIA;

Considering : that to implement Article 16 of Act No. 10 of 1997 on Nuclear Power, it is deemed necessary to stipulate a Government Regulation on the Safety and Health against the Utilization of Ionizing Radiation.

Bearing  
in mind : 1. Article 5 paragraph 2 of the Constitution of 1945 as already amended by the Second Amendment to the Constitution of 1945;

2. Act No. 1 of 1970 on Occupational Safety (State Gazette No. 1 of 1970, Supplement to State Gazette No. 2918);

3. Act No. 23 of 1992 on Health (State Gazette No. 100 of 1992, Supplement to State Gazette No. 3495);

4. Act No. 10 of 1997 on Nuclear Power (State Gazette No. 23 of 1997, Supplement to State Gazette No. 3676);

HAS DECIDED :

To stipulate :  
GOVERNMENT REGULATION ON SAFETY AND HEALTH AGAINST  
UTILIZATION OF IONIZING RADIATION.

CHAPTER I

GENERAL PROVISIONS

Article 1

In this Government Regulation, referred to as :

1. The safety and health against the utilization of ionizing radiation hereinafter referred to as the safety of radiation shall be the effort made to create a condition in such a way that the effect of the ionizing radiation on humans and the environment does not exceed the limit values stipulated.

2. The nuclear power shall be the power in whatever form which is released from the process of nuclear transformation, including the power originating from the ionizing radiation source.

3. The installation shall be the installation of radioactive substances and or the installation of the ionizing radiation source.

4. The ionizing radiation shall be the electromagnetic wave and particle which can ionize the media it passes due to the energy possessed.

5. The dosage limit value shall be the maximum dosage permitted by the Controlling Agency which can be accepted by radiation workers and members of society within a certain period without creating significant genetic and somatic effects resulting from the utilization of the nuclear power.

6. The radiation dosage shall be the total radiation found in the radiation field or the total radiation energy absorbed or received by the matter passed.

7. The dosage record shall be the record on the dosage value received by radiation workers during they work in the radiation field.

8. The installation businessman shall be the installation manager or another person appointed to represent and to be responsible for the installation.

9. The protection officer shall be the officer who is appointed by the installation businessman and declared by the Controlling Agency capable of performing the work relating to the protection of radiation.

10. The radiation worker shall be anyone who works in the installation of nuclear power or the installation of ionizing radiation who is anticipated to receive the annual radiation dosage which exceeds the dosage for the general public.

11. The radiation accident shall be the occurrence which is not planned, including the operation error, damage and failure of functions of devices or other events leading to the impact of radiation, condition of radiation exposure and or contamination which exceeds the safety limit.

12. The executing agency shall be the agency which functions to implement the utilization of nuclear power.
13. The controlling agency shall be the agency which exercises control over all activities of utilization of nuclear power.

**CHAPTER II**  
**SCOPE AND OBJECTIVE**  
**Article 2**

1. The Government Regulation governs the requirements for the systems of dosage restriction, management of radiation safety, calibration, alertness and control of radiation accidents.
2. The objective of the Government Regulation is to guarantee safety, security and tranquility, health of workers and members of the society, and protection for the environment.

**CHAPTER III**  
**SYSTEM OF DOSAGE RESTRICTION**  
**Article 3**

To guarantee the safety and health of workers, the public and the environment, the installation businessman who utilizes the nuclear power which can result in the reception of radiation dosage shall meet the following principles on safety and health :

- a. any utilization of nuclear power shall have more benefits than the risks created;
- b. the reception of the dosage of radiation against workers or the public shall not exceed the dosage limit value stipulated by the controlling agency;
- c. the utilization of nuclear power shall be planned and the source of radiation shall be designed and operated to assure that the radiation exposure is reduced to a minimum.

**Article 4**

1. The installation businessman who designs, makes, operates and or maintains the system and component of by radiation source which has the potential of radiation danger shall prevent excessive dosage reception.
2. The system and component of a radiation source as referred to in paragraph 1 shall be designed and made in accordance with the standard.
3. The standard required as referred to in paragraph 2 is further stipulated by a Decision of the Head of the Controlling Agency.

**Article 5**

1. If in a location there are several facilities for utilization of nuclear power, the installation businessman stipulates the level of dosage which is lower for each installation in order that the cumulative dosage does not exceed the dosage limit value.
2. The release of radioactive substances to the environment from all facilities as referred to in paragraph 1 shall not result in the dosage limit value for the public being exceeded.

#### **Article 6**

1. In applying the dosage for medical purposes with the aim of diagnosis and therapy, the installation businessman shall heed the protection of patients against the radiation as referred to in Article 3 letters a and c.
2. The level of reference for dosage, the rate of dosage and activity given for diagnostic and therapeutic purposes are further stipulated by a Decision of the Head of the Controlling Agency.

### **CHAPTER IV RADIATION SAFETY MANAGEMENT SYSTEM**

#### **First Part**

#### **General**

#### **Article 7**

The installation businessman shall apply the radiation safety management system, which covers the radiation protection organization, the utilization of radiation dosage and radioactivity, radiation protection equipment, general check-up, storage of document, guarantee of quality and education and training.

#### **Second Part**

#### **Radiation Protection Organization**

#### **Article 8**

The installation businessman shall possess the radiation protection organization which at least consists of the installation businessman, radiation protection officers and radiation workers.

#### **Article 9**

1. Any installation businessman who utilizes nuclear power shall have at least 1 (one) radiation protection officer.
2. The installation businessman shall appoint another person or himself as the radiation protection officer.
3. The requirements for the radiation protection officer as referred to in paragraphs 1 and 2 are further stipulated by a Decision of the Head of the Controlling Agency.

#### **Third Part**

#### **Monitoring of Radiation Dosage and Radioactivity**

#### **Article 10**

1. The installation businessman shall obligate any radiation worker to use the equipment to monitor individual dosage, in accordance with the type of the installation and source of radiation used.
2. The equipment as referred to in paragraph 1 shall be processed and read by the agency or body which has been accredited and appointed by the Controlling Agency.
3. The requirements to be eligible for appointment as referred to in paragraph 2 are further stipulated by a Decision of the Head of the Controlling Agency.

#### **Article 11**

1. The results of the processing and reading of the equipment to monitor the individual dosage as referred to in Article 10 paragraph 2 shall be submitted to the installation businessman and the Controlling Agency.
2. The installation businessman shall evaluate the results of the monitoring of individual dosage as referred to in paragraph 1.
3. If the results of the evaluation as referred to in paragraph 2 indicate excessive dosage, the installation businessman shall implement a follow-up action.
4. The Controlling Agency can conduct examination if the results of the evaluation indicate the excessive dosage.

#### **Article 12**

1. The installation businessman is responsible for the implementation of the recording of the recording of the radiation dosage received by each radiation worker.
2. The recording of the dosage as referred to in paragraph 1 is conducted by the radiation protection officer.
3. Any radiation worker has the right to know the dosage during the work.
4. The dosage record shall be able to be shown at any time if requested by the Controlling Agency.

#### **Article 13**

1. The installation businessman shall give the copy of the dosage record to the radiation worker who will terminate the working relationship.
2. If the worker as referred to in paragraph 1 moves to another installation which utilizes nuclear power he shall give the copy of the dosage record as referred to in paragraph 1 to the new installation businessman.

#### **Article 14**

1. The installation businessman shall conduct the monitoring of the working area continuously, periodically and or at any time based on the type of the installation and source of radiation used.
2. The installation businessman shall record and make documents of the results of the monitoring of the working area.
3. The monitoring of the working area as referred to in paragraph 1 is further stipulated by a Decision of the Head of the Controlling Agency.

#### **Article 15**

1. The installation businessman shall conduct the monitoring of the radioactivity level of the discharge of radioactive substances to the environment, continuously, periodically and or at any time.
2. The discharge of the radioactive substances to the environment as referred to in paragraph 1 shall not exceed the radioactivity limit value which is further stipulated by a Decision of the Head of the Controlling Agency.

3. The installation businessman shall record and make documents of the results of the monitoring as referred to in paragraph 1.

#### **Article 16**

1. If the installation businessman cannot conduct the monitoring as referred to in Article 15 paragraph 1, the installation businessman can appoint another agency or body which has been accredited and appointed by the Controlling Agency.

#### **Article 17**

The installation businessman shall be able to show the record and the documentation as referred to in Article 15 paragraph 3 at any time if requested by the Controlling Agency.

### **Fourth Part Radiation Protection Equipment Article 18**

The installation businessman shall provide the radiation protection equipment, the individual dosage monitor, working area monitor and environment monitor, which can function well in accordance with the type of the radiation source used.

### **Fifth Part Medical Check-Up Article 19**

1. Anyone who will work as a radiation worker shall be healthy both physically and mentally and shall be at least 18 (eighteen) years of age.
2. The installation businessman shall arrange the preliminary medical check-up accurately and thoroughly, for anyone who will work as a radiation worker as referred to in paragraph 1.
3. The medical check-up as referred to in paragraph 2 is conducted by a doctor appointed by the installation businessman and approved by the agency which has authority in the area of manpower, general hospitals or the Executing Agency.
4. The type of the medical check-up as referred to in paragraph 2 is further stipulated by a Decision of the Head of the Controlling Agency after being consulted with the agency which has the authority in the area of health.

#### **Article 20**

1. The installation businessman shall arrange the medical check-up for any worker of radiation periodically during the work at once a year.
2. If deemed necessary, the installation businessman can arrange a special examination.

#### **Article 21**

1. The installation businessman shall have the health of radiation workers who will terminate the working relationship examined accurately and thoroughly by the doctor who is appointed by the installation businessman and approved by the agency which has the authority in the area of manpower, general hospitals or the Executing Agency.
2. Result of the health examination as referred to in paragraph 1 shall be delivered to the

radiation worker concerned.

#### **Article 22**

The installation businessman shall record the results of the medical check-up of each radiation worker on a health card and keep the card under the control of a doctor or another officer appointed by the installation businessman.

#### **Article 23**

In case a radiation accident occurs, the installation businessman shall arrange the medical check-up for the radiation work or who supposedly receives excessive radiation.

#### **Article 24**

The cost of the medical check-up as referred to in Article 19 paragraph 2, Articles 20, 21 and 23 is to be borne by the installation businessman concerned.

### **Sixth Part Storage of Documents Article 25**

The installation businessman shall store the documents which contain dosage records, results of the monitoring of the working area, results of the monitoring of the environment and health cards of workers as referred to in Articles 12, 14, 15 and 22 for 30 (thirty) years as from the time radiation workers stop working.

### **Seventh Part Guarantee of Quality Article 26**

1. The installation businessman shall prepare the program for guarantee of quality for the installation which has high radiology impact potential for the activities of planning, development, operation, maintenance of the installation and the management of radioactive waste.
2. The program for guarantee of quality which has been prepared by the installation businessman as referred to in paragraph 1 is submitted to the Head of the Controlling Agency for approval.
3. The program for guarantee of the quality which has been approved as referred to in paragraph 2 shall be implemented by the installation businessman.

#### **Article 27**

The Controlling Agency conducts the inspection and audit during implementation of the program for guarantee of quality to guarantee the effectiveness of the implementation.

#### **Article 28**

The provisions and guidelines for the preparation of the program for guarantee of quality as referred to in Article 26 paragraph 1 and Article 27 will be further stipulated by a Decision of the Head of the Controlling Agency.

### **Eight Part**

#### **Article 29**

1. Any radiation worker shall obtain education and training on the occupational safety and health against radiation.
2. The installation businessman is responsible for the implementation of the education and training as referred to in paragraph
3. The guidelines on the education and training for radiation workers as referred to in paragraph 1 are further stipulated by a Decision of the Head of the Controlling Agency.

### **CHAPTER V CALIBRATION Article 30**

1. The installation businessman shall calibrate the radiation measuring device periodically at least once a year.
2. The installation businessman shall calibrate the radiation output of the radiotherapy equipment periodically at least twice a year.
3. The calibration of the radiation measuring device and or the radiotherapy equipment as referred to in paragraphs 1 and 2 can only be conducted by the agency which has been accredited and appointed by the Controlling Agency.

#### **Article 31**

The provisions on the calibration as referred to in Article 30 are further stipulated by a Decision of the Head of the Controlling Agency.

### **CHAPTER VI CONTROL OF RADIATION ACCIDENTS Article 32**

The installation businessman shall prevent the occurrence of radiation accidents.

#### **Article 33**

1. In case that a the radiation accident occurs, the installation businessman shall conduct control.
2. In an effort to control the radiation accident as refferd to in paragraph 1, the human safety shall be prioritized.
3. In the case that the radiation accident occurs, the installation businessman shall immediately report it and its control to the Controlling Agency and other related ahencies.

#### **Article 34**

1. The installation businessman who has an installation with high technology impact potential shall have Plan for Control of Emergency to overcome the dangers of the radiation accident which might occur during the operation of the installation.
2. The Plan for Control of Emergency as referred to in paragraph 1 is worked out by the



installation businessman, and at least shall contain :

- a. The type/classification of the accidents which might occur in the installation.
- b. The efforts to control the type/classification of the accidents;
- c. The organization to control emergencies;
- d. The procedures for the control of emergencies;
- e. The control equipment which shall be provided and the maintenance;
- f. The personnel to control the emergencies;
- g. The training to control the emergencies;
- h. The system of communication with other parties relating to the control of the emergencies.

#### Article 35

The provisions as referred to in Article 33 and Article 34 are further stipulated by a Decision of the Head of the Controlling Agency.

### CHAPTER VII ADMINISTRATIVE SANCTIONS

#### Article 36

1. The Controlling Agency can give written warnings to the installation business who violates the provisions in Article 4, Article 5 paragraph 1, Article 6 paragraph 1, Article 9 paragraph 1, Article 10 paragraph 1 and paragraph 2, Article 11 paragraphs 1, 2 and 3, Article 12, Article 13, Article 14 paragraph 1 and paragraph 2, Article 15, Article 17, Article 18, Article 19 paragraph 1 and paragraph 2, Article 20, Article 21, Article 22, Article 23, Article 24, Article 25, Article 26, Article 29 paragraph 2, Article 30, Article 32, Article 33, and Article 34 in this Government Regulation.
2. The duration of the written warnings as referred to in paragraph 1 is 14 (fourteen) days as from the issuance of the warnings and it can be extended twice if needed.
3. If the written warnings as referred to in paragraph 2 are ignored, the Controlling Agency can temporarily stop the operation of the installation for 30 (thirty) days as from the time the order for temporarily stopping the installation is issued.
4. If the installation businessman whose operation is temporarily stopped as referred to in paragraph 3 still ignores the warnings, the permit for the utilization of nuclear power can be revoked by the Controlling Agency.

#### Article 37

1. The installation businessman who violates the provisions in Article 36 paragraph which can create dangers to workers, the public and the environment can be directly given a written warning accompanied with the temporary stopping of the installation operation by the Controlling Agency.
2. If within a maximal period of 30 (thirty) days the installation businessman ignores the warning, the permit for the utilization of nuclear power can be revoked by the Controlling Agency.

#### Article 38

The Controlling Agency can directly revoke the permit for the utilization of nuclear power, if the installation businessman creates radiation accidents due to his carelessness after being evaluated by the Controlling Agency.

**CHAPTER VIII**  
**TRANSITIONAL PROVISION**  
**Article 39**

At the time this Government Regulation takes effect, all implementing regulations of the Government Regulation Number 11 of 1975 on Occupational Safety Against radiation relating to the occupational safety against radiation are still valid, as long as they are not against the provisions in this Government Regulation.

**CHAPTER IX**  
**CLOSING PROVISIONS**  
**Article 40**

At the time this Government Regulation takes effect, the Government Regulation Number 11 of 1975 on Occupational Safety Against Radiation is declared void.

**Article 41**

This Government Regulation shall come into force as from the date of promulgation.

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

Promulgated at J a k a r t a  
On August 21, 2000

Ratified at J a k a r t a  
On August 21, 2000

THE STATE SECRETARY,  
OF THE REPUBLIC OF INDONESIA

THE PRESIDENT OF THE REPUBLIC  
OF INDONESIA

signed

signed

DJOHAN EFFENDI

ABDURRAHMAN WAHID

STATE GAZETTE OF THE REPUBLIC OF INDONESIA NUMBER 136 OF 2000.

~~ELUCIDATION .....~~  
~~To be continue~~