

Democratic People's Republic of Korea

Radiation Contamination Prevention Law

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Chapter 1: Fundamentals of the Radiation Contamination Prevention Law

Article 1 (Purpose of the Radiation Contamination Prevention Law)

The Democratic People's Republic of Korea's Radiation Contamination Prevention Law serves to establish systems and order in the safe management of radioactive materials and nuclear facilities, the treatment of radioactive waste, and the monitoring of environmental radioactivity to prevent radiation contamination and protect the lives, health, and environment of the people.

Article 2 (Definitions)

The definitions of terms in this law are as follows:

1. Radioactive material refers to substances among radiation-emitting materials that exceed national radiation safety standards. Radioactive materials include naturally occurring radioactive materials such as uranium and thorium, and artificially created radioactive materials such as plutonium, strontium, and cesium. Facilities and devices that generate and emit radiation are treated the same as radioactive materials.
2. Nuclear facilities refer to facilities that produce, use, or store radioactive materials. Nuclear facilities include nuclear power plants, reactors, nuclear accelerators, and facilities for production, processing, storage, and reprocessing of radioactive materials.
3. Environmental radioactivity refers to natural and artificial radioactivity contained in the natural environment such as air, water, soil, and living organisms.

Article 3 (Principle of Preventing Radiation Contamination)

Thoroughly preventing radiation contamination is an important task to protect people's lives and health from radiation damage and to provide them with a safer and more cultural living environment. The state shall establish a well-organized system for radiation

contamination prevention, prevent radiation contamination in advance, and ensure the timely elimination of radiation damage.

Article 4 (Principle of Strengthening the Material and Technical Foundation in the Field of Radiation Contamination Prevention)

The state shall increase investment in the field of radiation contamination prevention and ensure the necessary conditions to continuously strengthen the material and technical foundation of this field.

Article 5 (Principle of Scientific and Modern Radiation Contamination Prevention)

The state shall strengthen scientific research work for radiation contamination prevention, actively adopt the achievements of advanced science and technology to make radiation contamination prevention scientific and modern, and systematically train specialized personnel.

Article 6 (Principle of Mass Radiation Contamination Prevention)

The state shall conduct scientific knowledge dissemination related to radiation contamination prevention in various forms and methods so that institutions, enterprises, organizations, and citizens are well aware of the risks of radiation contamination and actively participate in efforts to prevent it.

Article 7 (International Exchange and Cooperation)

The state shall develop exchange and cooperation with other countries and international organizations related to radiation contamination prevention.

Article 8 (Subjects of Application of the Law)

This law applies to institutions, enterprises, organizations, and citizens that handle radioactive materials, operate nuclear facilities, or are associated with them. This law also applies to permanent representative offices of other countries or international organizations stationed in our country, foreign investment enterprises, and foreigners.

Chapter 2: Safe Management of Radioactive Materials

Article 9 (Establishment of Radiation Contamination Prevention Measures According to Radiation Safety Standards)

Safely managing radioactive materials is a prerequisite for preventing radiation contamination. Institutions, enterprises, and organizations managing radioactive materials must strictly establish radiation contamination prevention measures in accordance with

radiation safety standards in advance. The Nuclear Safety Regulatory Agency establishes radiation safety standards.

Article 10 (Application for Production or Use of Radioactive Materials)

Institutions, enterprises, and organizations wishing to produce or use radioactive materials must submit application documents for the production or use of radioactive materials to the Nuclear Safety Regulatory Agency. The application documents must accurately state the purpose and method of production or use of radioactive materials, measures to prevent radiation contamination, and other relevant information.

Article 11 (Approval for Production or Use of Radioactive Materials)

The Nuclear Safety Regulatory Agency shall approve the production or use of radioactive materials based on a thorough review of the application documents and radiation safety inspection of the site. In this case, necessary materials may be requested from the relevant institutions, enterprises, and organizations. Approval for the production or use of radioactive materials cannot be granted if radiation safety is not guaranteed.

Article 12 (Registration of Radioactive Materials)

Radioactive materials and facilities and devices handling them shall be registered with the Nuclear Safety Regulatory Agency and the relevant social security agency. Unregistered radioactive materials and facilities and devices handling them cannot be used.

Article 13 (Supply, Transfer, and Return of Radioactive Materials)

When supplying, transferring, or returning radioactive materials, the relevant institutions, enterprises, and organizations must obtain approval from the Nuclear Safety Regulatory Agency and then supply, transfer, or return them according to established procedures.

Article 14 (Storage of Radioactive Materials)

When storing radioactive materials, the relevant institutions, enterprises, and organizations shall place them separately by nuclide in specially manufactured storage containers that can shield radiation, and store them in storage places with sufficient radiation safety conditions. In this case, radiation hazard symbols shall be placed on the storage containers, and other materials shall not be placed in radioactive material storage places. Radioactive material storage places shall undergo technical inspection by the Nuclear Safety Regulatory Agency, and protective zones shall be designated around the radioactive material storage places with necessary safety measures.

Article 15 (Entry and Exit of Radioactive Materials)

When giving or receiving radioactive materials, the relevant institutions, enterprises, and organizations shall strictly verify the entry and exit documents and give or receive them only in the presence of the relevant personnel. The status of entry and exit of radioactive materials shall be accurately registered in the entry and exit register.

Article 16 (Prohibited Activities in Radioactive Material Storage Places)

The following activities cannot be performed in radioactive material storage places:

1. Disclosing the type and quantity of radioactive materials without approval
2. Arbitrarily moving or changing the radioactive material storage place
3. Allowing external personnel to enter
4. Handling flammable, explosive materials, and the like around the radioactive material storage place

Article 17 (Inspection and Permission for Transport of Radioactive Materials)

When transporting radioactive materials, the relevant institutions, enterprises, and organizations must undergo radiation safety inspection by the Nuclear Safety Regulatory Agency and then obtain permission for the transport of radioactive materials from the relevant social security agency. Radioactive materials cannot be transported without radiation safety inspection and transport permission.

Article 18 (Safety Measures During Transport of Radioactive Materials)

Institutions, enterprises, and organizations transporting radioactive materials shall regularly measure the level of radiation contamination during transport, and if the level of radiation contamination is deemed to increase and cause radiation damage to the surrounding environment, they shall immediately stop transport, establish radiation contamination prevention measures, and then continue transport. Radiation hazard symbols shall be placed on the means of transport of radioactive materials. Social security agencies and relevant agencies shall give priority passage to transport vehicles carrying radioactive materials.

Article 19 (Import and Export of Radioactive Materials)

The import and export of radioactive materials are uniformly conducted by the Central Nuclear Safety Regulatory Agency. Institutions, enterprises, and organizations wishing to import or export radioactive materials shall submit documents related to the import or export of radioactive materials to the Central Nuclear Safety Regulatory Agency. In this

case, details such as the name, quantity, technical characteristics, and use of the radioactive materials to be exported or imported shall be specified.

Article 20 (Qualification for Handling Radioactive Materials)

Personnel handling radioactive materials must have the relevant qualifications. The Nuclear Safety Regulatory Agency grants qualifications for handling radioactive materials. Personnel without the relevant qualifications cannot handle radioactive materials.

Article 21 (Protection of Radioactive Material Handling Personnel)

The relevant institutions, enterprises, and organizations shall regularly conduct medical and dosimetric examinations of radioactive material handling personnel and strictly establish protective measures to prevent radiation damage. Radioactive material handling personnel shall be provided with hazard pay, supplementary leave, and necessary nutrients and labor protection materials according to established standards.

Article 22 (Production and Use of Radiation Generating Devices and Radioisotopes)

When producing or using radiation generating devices, radioisotopes, radiation diagnostic and treatment instruments, radioactive pharmaceuticals, or devices containing radioactive materials, the relevant institutions, enterprises, and organizations shall obtain approval from the Nuclear Safety Regulatory Agency.

Article 23 (Ensuring Radiation Safety When Using Nuclear Technology)

Institutions, enterprises, and organizations using nuclear technology for diagnosis and treatment, geological exploration, defect detection, automation, and scientific research shall strictly establish safety measures to prevent radiation damage. Radiation hazard symbols shall be placed on relevant devices, instruments, radioactive material storage containers, and workplaces, and unrelated personnel shall not be allowed to approach.

Chapter 3: Safe Management of Nuclear Facilities

Article 24 (Environmental Impact Assessment for Nuclear Facility Construction)

When constructing nuclear facilities, the relevant institutions and enterprises must undergo an environmental impact assessment by the land and environment protection agency. The subjects, procedures, and methods of environmental impact assessment follow the relevant laws and regulations.

Article 25 (Nuclear Safety Analysis and Evaluation)

Institutions and enterprises constructing or operating nuclear facilities shall prepare a nuclear safety analysis and evaluation report that guarantees the safety of nuclear facilities

and radiation safety, and submit it for review by the Nuclear Safety Regulatory Agency. Nuclear safety analysis and evaluation are divided into preliminary safety analysis and evaluation and final safety analysis and evaluation. Preliminary safety analysis and evaluation are conducted at the stage of construction permit for nuclear facilities, and final safety analysis and evaluation are conducted at the stage of operation permit. The nuclear safety analysis report shall include site investigation materials, probability analysis and evaluation materials for accidents at nuclear facilities, and evaluation materials for the impact of radiation on the surrounding environment.

Article 26 (Designation of Control Zone, Protection Zone, and Monitoring Zone)

Radiation control zones, radiation protection zones, and radiation monitoring zones are designated in certain areas around nuclear facilities to prevent radiation damage. The radiation control zone is designated within the range where an effective radiation dose of 10 mSv or more per year may be received, the radiation protection zone is designated within the range where an effective radiation dose of 1 mSv or more per year may be received, and the radiation monitoring zone is designated within the range where radiation effects are deemed to occur. The Nuclear Safety Regulatory Agency designates radiation control zones, radiation protection zones, and radiation monitoring zones. The order to be observed in radiation control zones, radiation protection zones, and radiation monitoring zones follows separate regulations.

Article 27 (Radiation Monitoring of Nuclear Facilities)

Institutions and enterprises operating nuclear facilities shall establish a radiation monitoring system and regularly monitor radiation. If radiation exceeding the radiation safety standards is emitted, they shall promptly notify the Nuclear Safety Regulatory Agency and the relevant social security agency and establish necessary safety measures.

Article 28 (Radiation Monitoring Around Nuclear Facilities)

The Nuclear Safety Regulatory Agency shall regularly monitor the state of radioactive contamination of air, water, soil, and living organisms around nuclear facilities and report the results to the relevant agencies. If the level of radioactive contamination exceeds the radiation safety standards, relevant institutions and enterprises shall be directed to take necessary measures in a timely manner.

Chapter 4: Treatment of Radioactive Waste

Article 29 (Requirement to Lower the Amount of Radioactive Waste)

Institutions, enterprises, and organizations producing or using radioactive materials shall renew equipment and technology to reduce the amount of radioactive waste generated

during production and use to below the established standards as much as possible. The Nuclear Safety Regulatory Agency establishes standards for the amount of radioactive waste generated during the production and use of radioactive materials.

Article 30 (Registration of Radioactive Waste)

The relevant institutions, enterprises, and organizations shall register radioactive waste generated during the production or use of radioactive materials and then treat it according to established procedures.

Article 31 (Treatment of Radioactive Waste by Specialized Agencies)

The treatment of highly radioactive contaminated waste is performed by radioactive waste treatment agencies. When treating highly radioactive contaminated waste, the relevant institutions, enterprises, and organizations shall send it to a radioactive waste treatment agency.

Article 32 (Places and Methods for Treating Radioactive Waste)

Radioactive waste treatment agencies shall treat radioactive waste in designated places according to established methods. In this case, they shall report the places for treating radioactive waste and the status of treatment to the relevant social security agency. The Nuclear Safety Regulatory Agency determines the places and methods for treating radioactive waste. Radioactive waste cannot be treated in places such as residential areas, water sources, farmland, reservoirs, lakes, or seas.

Article 33 (Environmental Discharge of Radioactive Waste)

Institutions, enterprises, and organizations may discharge low-level radioactive waste into the environment with the approval of the Nuclear Safety Regulatory Agency. Radioactive waste with a level of radioactive contamination exceeding the established discharge standards cannot be discharged into the environment.

Article 34 (Prohibition of Import of Radioactive Waste and Radioactive Contaminated Materials)

The import of radioactive waste and radioactive contaminated materials is prohibited. Transport vehicles carrying radioactive waste or radioactive contaminated materials cannot pass through the territory of the Democratic People's Republic of Korea.

Chapter 5: Monitoring of Environmental Radioactivity

Article 35 (Establishment of Environmental Radioactivity Monitoring System)

The Nuclear Safety Regulatory Agency shall establish an environmental radioactivity monitoring system nationwide and strictly monitor the environment for radioactivity. Environmental radioactivity monitoring stations are established in the central area, provinces, and other necessary regions for environmental radioactivity monitoring.

Article 36 (Territories for Environmental Radioactivity Monitoring)

The Nuclear Safety Regulatory Agency shall designate as environmental radioactivity monitoring territories and regularly monitor important event venues, revolutionary battle sites, revolutionary historical sites, areas surrounding nuclear facilities or institutions, enterprises, and organizations handling radioactive materials, and other necessary regions and waters.

Article 37 (Targets and Contents of Environmental Radioactivity Monitoring)

The targets and contents of environmental radioactivity monitoring are as follows:

1. Monitor radioactive nuclides contained in air, water, soil, and living organisms and their level of contamination.
2. Monitor the effective dose, annual cumulative dose, and collective dose in the monitoring area.
3. Monitor radioactive nuclides contained in agricultural, livestock, and fishery products produced around nuclear facilities or institutions, enterprises, and organizations handling radioactive materials and their level of contamination.
4. Monitor radioactive nuclides contained in buildings, raw materials, equipment, products, and the like and their level of contamination.

Article 38 (Methods of Environmental Radioactivity Monitoring)

Environmental radioactivity monitoring is conducted through regular monitoring, special monitoring, and mobile monitoring.

Article 39 (Radioactivity Inspection of Exploration Samples)

When obtaining exploration samples, underground resource exploration institutions, enterprises, and organizations shall undergo radioactivity inspection of the samples. The Nuclear Safety Regulatory Agency conducts radioactivity inspection of exploration samples. It is prohibited to discard exploration samples without undergoing radioactivity inspection.

Article 40 (Radiation Safety Inspection When Developing Coal Mines and Mines)

Institutions, enterprises, and organizations wishing to develop coal mines and mines shall undergo radiation safety inspection by the Nuclear Safety Regulatory Agency before receiving development approval. Development approval cannot be granted if radiation safety inspection by the Nuclear Safety Regulatory Agency has not been conducted or if the radiation safety standards are not met.

Article 41 (Radiation Safety Inspection of Coal Mines and Mines That May Cause Radioactive Contamination)

The Nuclear Safety Regulatory Agency shall identify coal mines and mines that may cause radioactive contamination and regularly conduct radiation safety inspections of workplaces and products. If there is a risk of radioactive contamination, production shall be suspended and necessary safety measures shall be established.

Article 42 (Radiation Safety Inspection of Construction Works)

The relevant institutions, enterprises, and organizations shall undergo radiation safety inspection of construction works. When conducting completion inspections of construction works, the national construction supervision agency shall have personnel from the relevant specialized fields participate and strictly conduct radiation safety inspections. Completion inspection certificates cannot be issued for construction works that have not undergone radiation safety inspection or do not meet radiation safety standards.

Article 43 (Radiation Safety Inspection of Production Environment, Products, and Import and Export Items)

The Nuclear Safety Regulatory Agency shall establish a radiation safety inspection system for the production environment and products of institutions, enterprises, and organizations, and for import and export items, and strictly conduct radiation safety inspections. Production permits, specification approvals, import or export approvals, and the like cannot be granted for products that have not undergone radiation safety inspection or do not meet radiation safety standards.

Article 44 (Methods of Radiation Safety Inspection)

Radiation safety inspection of products or import and export items is conducted by sampling and inspection. The relevant institutions, enterprises, and organizations shall provide the necessary samples for radiation safety inspection in a timely manner.

Article 45 (Emergency Measures in Case of Radioactive Contamination Damage)

The Cabinet, the Central Nuclear Safety Regulatory Agency, and the relevant agencies shall establish the following measures if there is a risk of radioactive contamination damage to our country due to a nuclear accident or nuclear explosion:

1. Organize special monitoring of environmental radioactivity monitoring targets.
2. Restrict or prohibit the import of products such as agricultural, livestock, and fishery products, food products, and pharmaceuticals produced in areas where nuclear accidents or nuclear explosions have occurred.
3. Strictly conduct radioactive contamination inspections of agricultural, livestock, and fishery products, food products, pharmaceuticals, and drinking water produced in radioactive contaminated areas, and ensure that they are produced, supplied, sold, and used only if radiation safety is guaranteed.
4. Improve soil contaminated with radioactive materials and adopt scientific fertilization methods to prevent radioactive materials in the soil from affecting agricultural and livestock products.
5. Strictly conduct medical examinations of residents in radioactive contaminated areas and establish appropriate treatment measures.
6. Provide timely information to residents about radiation contamination prevention work through propaganda means such as newspapers and broadcasts.

Article 46 (Verification of Radiation Measurement Instruments)

Radiation measurement instruments can only be used after verification by the Nuclear Safety Regulatory Agency. Radiation measurement instruments that have not been verified or have not passed verification cannot be used.

Chapter 6: Guidance and Control of Radiation Contamination Prevention Work

Article 47 (Guidance of Radiation Contamination Prevention Work)

Guidance on radiation contamination prevention work is provided by the Central Nuclear Safety Regulatory Agency under the unified guidance of the Cabinet. The Central Nuclear Safety Regulatory Agency shall regularly identify and guide the implementation of state policies related to radiation contamination prevention.

Article 48 (Supervision and Control of Radiation Contamination Prevention Work)

Supervision and control of radiation contamination prevention work are conducted by the Central Nuclear Safety Regulatory Agency and the relevant supervision and control agencies. The Central Nuclear Safety Regulatory Agency and the relevant supervision and

control agencies shall strictly supervise and control the observance of radiation contamination prevention order by institutions, enterprises, organizations, and citizens.

Article 49 (Administrative Responsibility)

In the following cases, appropriate administrative penalties shall be imposed according to the situation on responsible officials of institutions, enterprises, and organizations and individual citizens:

1. Producing or using radioactive materials without approval
2. Hindering radiation contamination prevention work by violating the registration, supply, transfer, return, storage, entry and exit, transport, import and export order of radioactive materials
3. Causing accidents by violating the order of production and use of radiation generating devices and the use of nuclear technology
4. Hindering radiation contamination prevention work by violating the order of environmental impact assessment and nuclear safety analysis and evaluation for nuclear facilities
5. Hindering radiation contamination prevention work by not properly establishing radiation safety measures for nuclear facilities and their surroundings
6. Hindering radiation contamination prevention work by violating the registration and treatment order of radioactive waste
7. Discharging radioactive waste into the environment in violation of the emission standards for radioactive contaminated materials
8. Contaminating the environment by bringing radioactive materials into our country
9. Hindering environmental protection by not properly monitoring environmental radioactivity
10. Hindering the promotion of people's health by constructing or producing or importing and exporting products without ensuring radiation safety
11. Hindering radiation contamination prevention work by violating the verification order for radiation measurement instruments
12. Hindering radiation contamination prevention work by not providing the necessary conditions for radiation contamination prevention work

Article 50 (Criminal Responsibility)

If the acts in Article 49 of this law constitute crimes, criminal responsibility shall be imposed on responsible officials of institutions, enterprises, and organizations and individual citizens according to the relevant articles of the Criminal Law.