# THE PRESIDENT OF THE SOCIALIST REPUBLIC OF VIETNAM

SOCIALIST REPUBLIC OF VIET NAM Independence - Freedom - Happiness

No. 18/2008/QH12

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### **LAW**

ON ATOMIC ENERGY

(No. 18/2008/QH12)

Pursuant to the 1992 Constitution of the Socialist Republic of Vietnam which was amended and supplemented under Resolution No. 51/2001/ QH10;

The National Assembly promulgates the Law on Atomic Energy.

## **Chapter I**

#### **GENERAL PROVISIONS**

#### Article 1.- Scope of regulation

This Law provides for activities in the domain of atomic energy and the assurance of safety and security in these activities.

#### **Article 2**.- Subjects of application

This Law applies to domestic organizations and individuals, overseas Vietnamese, foreign organizations and individuals, and international organizations that conduct activities in the domain of atomic energy in Vietnam.

#### Article 3.- Interpretation of terms

In this Law, the terms and phrases below are construed as follows:

- 1. Atomic energy means energy released from the transformation of atomic nuclei, including fission energy, fusion energy and energy released from radioactive decay. It is a kind of energy of ionizing electromagnetic waves or accelerated panicles.
- 2. Atomic energy activities means activities of

scientific research and technological development in the domain of atomic energy; building, operation, maintenance, exploitation, management and dismantlement of nuclear facilities and radiation facilities; exploration, exploitation, processing and use of radioactive ores; production, storage, use, transportation, transfer, export and import of radioactive sources, radiation equipment, nuclear fuel, nuclear source material, nuclear material and equipment; disposal and storage of radioactive waste and atomic energy application services.

- 3. Radiation means a beam of particles or ionizing electromagnetic waves.
- 4. Radiation source means a radioactive source or radiation equipment.
- 5. Radioactive source means a radioactive substance produced for use, not including nuclear material.
- 6. Radiation equipment means an equipment that radiates or capable of radiating.
- 7. Radioactivity means a quantity denoting the number of disintegrated nuclei per unit of time.
- 8. Radioactive substance means a substance that radiates as a result of nuclear decay or transition of nuclear energy level, and has a specific radioactivity or a total activity exceeding

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the exemption level.

9. Radioactive pharmaceutical means a pharmaceutical containing a radioactive substance and used for disease diagnosis and treatment.

Radioactive isotope (radioisotope) means a variant of a chemical element that can radioactively disintegrate.

- 11. Radioactive waste means a refuse containing a radioactive substance or a radioactively contaminated object which must be disposed of.
- 12. Irradiation means the effect of radiation on human beings, the environment, animals, plants or other material objects.
- 13. Irradiation dose means a quantity measuring the level of irradiation.
- 14. Radiation inspection means the measurement of irradiation doses or levels of radioactive contamination for the purpose of assessing and controlling the level of irradiation caused by radiation or radioactive substances.
- 15. Nuclear source material means any of the following materials: uranium or thorium in the form of ore or mine tailings; uranium containing the isotope 235 less than natural uranium; ores containing by weight 0.05% or more of thorium or uranium; other uranium or thorium compounds of a concentration not up to the level for being treated as nuclear material.
- 16. Nuclear material means a fissionable material, including plutonium with isotopic concentration not exceeding 80% in plutonium 238, uranium 233. uranium enriched in the isotope 235 or 253, or uranium with an isotopic composition as occurring in nature other than in the form of ore or mine tailings.
- 17. Nuclear fuel means a nuclear material produced for use as a fuel for nuclear reactors.
- 18. Nuclear equipment means a nuclear reactor or an equipment for enriching uranium, producing nuclear fuel or disposing of spent nuclear fuel.
- 19. Nuclear fuel cycle means a series of operations associated with the generation of nuclear energy, from mining and processing of uranium or thorium ores; enrichment of uranium: production of nuclear fuel: use of fuel in nuclear reactors: reprocessing of spent nuclear fuel, to disposal and storage of radioactive waste discharged from the generation of nuclear energy, and related research and development activities.
- 20. Radiation safety means the application of measures against radiation hazards, prevention of incidents or mitigation of irradiation consequences for human beings and the environment.
- 21. Nuclear safety means the application of measures to prevent incidents or mitigate consequences of incidents caused by nuclear equipment or material to human beings and the environment.
- 22. Security of radioactive source, nuclear material and equipment means the application of measures to detect, prevent and respond to acts of misappropriating, sabotaging, illegally transferring or using radioactive source, nuclear material or equipment, and the risk of loss of radioactive source, nuclear material or equipment.
- 23. Level for exemption from declaration or licensing means a level of radioactivity or capacity of radiation equipment at or below which radioactive substances or radiation equipment are considered harmless to human beings and the environment.

#### **Article 4.-** Application of international laws and treaties

- 1. Atomic energy activities and assurance of radiation safety and nuclear safety (below collectively referred to as safety) and security of radioactive source, nuclear material and equipment (below collectively referred to as security) in these activities comply with the provisions of this Law and other relevant provisions of law.
- 2. In case the provisions of this Law are different from those of another law on the same

content related to atomic energy activities and assurance of safety and security in these activities, the provisions of this Law prevail.

3. In case a treaty to which the Socialist Republic of Vietnam is a contracting party contains provisions different from those of this Law, that treaty prevails.

## Article 5.- The State's policies on the domain of atomic energy

- 1. To invest and encourage domestic organizations and individuals, overseas Vietnamese, foreign organizations and individuals, and international organizations to invest in atomic energy activities for socio-economic development
- 2. To concentrate investment in developing nuclear power, building physical and technical foundations, training human resources, conducting scientific research and technological development for developing nuclear power.
- 3. To attach importance to investment in building physical and technical foundations and training human resources to ensure safety and security of atomic energy activities.
- 4. To prioritize investment in building technical infrastructure, developing culture and education and ensuring social welfare in areas where nuclear power plants are located.
- 5. To create conditions for organizations and individuals to invest in developing nuclear power.
- **Article 6.-** Principles for atomic energy activities and assurance of safety and security in these activities
- 1. Atomic energy activities are conducted for peaceful purposes and serving socio-economic development.
- 2. Atomic energy activities must ensure safety for human health and life and the environment, and social order and safety.
- 3. Management of safety and security in atomic energy activities must be objective and scientific.

#### **Article 7.-** State management responsibilities in the domain of atomic energy

- 1. The Government shall perform the unified state management of atomic energy.
- 2. The Science and Technology Ministry shall take responsibility before the Government for performing the state management of atomic energy.
- 3. Ministries and ministerial-level agencies shall, within the ambit of their tasks and powers, perform the state management of atomic energy according to the Government's assignment.
- 4. People's Committees of provinces and centrally run cities (below referred to as provincial-level People's Committees) shall perform the state management of atomic energy according to the Government's decentralization.

#### **Article 8.-** Tasks and powers of the radiation and nuclear safety agency

The radiation and nuclear safety agency under the Science and Technology Ministry shall assist the Minister in performing the following tasks and exercising the following powers:

- 1. Elaborating draft legal documents on radiation and nuclear safety;
- 2. Organizing the declaration of radioactive substances, radiation equipment nuclear material, nuclear equipment, and the grant of licenses to perform radiation jobs according to its competence;
- 3. Assessing and organizing the assessment of radiation and nuclear safety;
- 4. Inspecting, examining, and handling violations of regulations on radiation and nuclear safety; ordering cessation of radiation jobs according to its competence; proposing competent

state agencies to suspend the operation of research nuclear reactors or nuclear power plants upon detecting signs of unsafety;

- 5. Organizing nuclear control activities under law;
- 6. Participating in dealing with radiation or nuclear incidents according to its competence;
- 7. Building and updating a national system of information on radiation and nuclear safety;
- 8. Organizing and coordinating with other agencies in organizing professional training, retraining or guidance on radiation and nuclear safety;
- 9. Organizing activities of international cooperation in radiation and nuclear safety.
- **Article 9.-** The National Council for Atomic Energy Development and Application and the National Council for Nuclear Safety
- 1. The National Council for Atomic Energy Development and Application is a body functioning to advise the Prime Minister on strategies and policies on atomic energy development and application: plannings and plans on atomic energy research, development and use.
- 2. The National Council for Nuclear Safety is a body functioning to advise the Prime Minister on policies and measures to assure nuclear safety in the use of atomic energy, in the course of operation of nuclear power plants as well as measures to remedy particularly serious nuclear incidents; to examine and evaluate safety reports of nuclear power plants and results of assessment by the radiation and nuclear safety agency.
- 3. The Prime Minister shall specify the organization and operation of the National Council for Atomic Energy Development and Application and the National Council for Nuclear Safety.

#### Article 10.- Nuclear control

1. The control of the use of nuclear material, the control of material and equipment used in the nuclear fuel cycle, and the control of related activities in order to prevent the proliferation of nuclear weapons, illegal transportation and use of nuclear material comply with law.

The Prime Minister shall specify nuclear control activities.

2. Organizations and individuals that control nuclear facilities, nuclear material, materials and equipment used in the nuclear fuel cycle, or carry out related activities shall abide by requests of competent state management agencies conducting nuclear control activities.

## **Article 11.-** International cooperation in the domain of atomic energy

- 1. The State undertakes international cooperation in the domain of atomic energy on the principles of respect for independence and sovereignty of other nations, equality and mutual benefit.
- 2. The State creates conditions for domestic organizations and individuals, overseas Vietnamese, foreign organizations and individuals, and international organizations to enter into cooperation in the domain of atomic energy for socio-economic development.

#### Article 12.- Prohibited acts

- 1. Taking advantage of or abusing atomic energy activities to infringe upon independence, sovereignty or territorial integrity, interfere in internal affairs or threaten national security and interests; infringe upon lawful rights and interests of organizations and individuals, or harm human health or life or the environment.
- 2. Researching, developing, manufacturing, trading in. transporting, transferring, storing, using, or threatening to use nuclear or radiation weapons.
- 3. Performing radiation jobs without licenses issued by competent state management agencies under law.

- 4. Importing radioactive waste.
- 5. Carrying radioactive waste or nuclear material by post.
- 6. Transporting radioactive substances or waste, nuclear source material or nuclear material (below collectively referred to as radioactive material) by vehicles or crafts neither designed nor furnished with equipment to assure safety or security.
- 7. Manufacturing, trading in. importing or exporting food, drinks, cosmetics, toys, jewelry or other consumer products and goods which have a radioactivity exceeding the level specified in relevant national technical regulations.
- 8. Violating regulations on safety and security assurance and conditions specified in licenses.
- 9. Illegally obstructing atomic energy activities.
- 10. Abetting in any form illegal atomic energy activities.
- 11. Encroaching works, equipment or means used for assuring atomic energy safety and security.
- 12. Appropriating, sabotaging or illegally transferring or using radioactive sources, nuclear source material, nuclear material and equipment.
- 13. Covering up information on radiation or nuclear incidents; supplying groundless or untruthful information on incidents, thus harming the Stale's interests or citizens' lawful rights and interests.
- 14. Using for improper purposes or disclosing confidential information relating to atomic energy.

## **Chapter II**

## MEASURES TO PROMOTE ATOMIC ENERGY DEVELOPMENT AND APPLICATION

**Article 13.-** Planning on atomic energy development and application

- 1. Planning on atomic energy development and application covers a master plan and detailed plans on specific fields.
- 2. Master plan is a plan setting forth basic and long-term orientations and general objectives of the development and application of atomic energy for peaceful purposes.

A master plan shall be elaborated in line with the socio-economic development strategy and the strategy on application of atomic energy for peaceful purposes. It contains the viewpoint on atomic energy development and application; overall objectives and general targets for atomic energy development and application; and implementation measures.

3. Detailed plans on specific fields are those setting forth long-term orientations and specific objectives of atomic energy development and application to health care; meteorology, hydrology, geology, mineral, environmental protection, agriculture, industry and other econotechnical sectors; development of nuclear power; exploration, exploitation, processing and use of radioactive ores and planning on radioactive waste burial and storage sites.

Detailed plans are elaborated in line with the master plan on atomic energy development and application and development plannings of related branches. A detailed plan for a specific field contains development viewpoints, objectives, targets, implementation measures and evaluated strategic environmental assessments.

- **Article 14.-** Responsibilities to elaborate and approve the planning on atomic energy development and application
- 1. Responsibilities to elaborate the planning on atomic energy development and application are specified as follows:

- a/ The Science and Technology Ministry shall assume the prime responsibility for elaborating a master plan on atomic energy development and application;
- b/ The Health Ministry shall assume the prime responsibility for elaborating a detailed plan on radiation development and application to health care;
- c/ The Natural Resources and Environment Ministry shall assume the prime responsibility for elaborating a detailed plan on radiation development and application to meteorology, hydrology, geology, mineral and environmental protection;
- d/ The Agriculture and Rural Development Ministry shall assume the prime responsibility for elaborating a detailed plan on radiation development and application to agriculture;
- e/ The Industry and Trade Ministry shall assume the prime responsibility for elaborating a detailed plan on radiation development and application to industry and other econo-technical branches; nuclear power development; exploration, exploitation, processing and use of radioactive ores;
- f/ The Construction Ministry shall assume the prime responsibility for elaborating a planning on radioactive waste burial and storage sites.
- 2. The Prime Minister shall approve the master plan and detailed plans on atomic energy development and application.
- 3. Planning agencies specified in Clause 1 of . this Article shall organize, guide, oversee and inspect the implementation of approved plans.

Article 15.- Adjustment of the planning on atomic energy development and application

The planning on atomic energy development and application will be adjusted when the bases for its elaboration specified in Article 13 of this Law change and the adjusted planning must be approved by the Prime Minister.

#### Article 16.- Development of human resources

- 1. The State formulates programs on training and building of human resources, especially high-level experts, to meet the requirements of research, development, application and assurance of safety and security in the domain of atomic energy.
- 2. The State adopts policies on preferential treatment and attraction of high-level experts at home and abroad to work in the domain of atomic energy.
- 3. The State encourages domestic organizations and individuals, overseas Vietnamese, foreign organizations and individuals, and international organizations to participate in implementing programs on training and building of human resources specified in Clause 1 of this Article.

## **Article 17.-** Atomic energy research, development and application

- 1. The State formulates scientific research and technological development programs to meet the requirements of atomic energy research development and application to socio-economic domains.
- 2. The State encourages domestic organizations and individuals, overseas Vietnamese, foreign organizations and individuals, and international organizations to participate in implementing scientific research and technological development programs specified in Clause 1 of this Article.

#### **Chapter III**

## RADIATION SAFETY, NUCLEAR SAFETY, AND SECURITY OF RADIOACTIVE SOURCES, NUCLEAR MATERIAL AND EQUIPMENT

Article 18.- Radiation jobs

Radiation jobs include the following activities:

- 1. Operating research nuclear reactors and nuclear power plants:
- 2. Operating irradiation equipment, including accelerators: radiotherapeutic equipment; irradiation equipment for sterilization, treatment of materials and use of other radiation equipment;
- 3. Producing and processing radioactive substances;
- 4. Storing and using radioactive substances;
- 5. Exploring, exploiting and processing radioactive ores;
- 6. Enriching uranium; producing nuclear fuel;
- 7. Disposing of, storing and burying radioactive waste and used radioactive sources and spent nuclear fuel;
- 8. Building, changing the operation scale and scope or terminating operation of radiation facilities and nuclear facilities;
- 9. Using nuclear material outside the nuclear fuel cycle;
- 10. Importing or exporting radioactive substances, nuclear source material, nuclear material and equipment;
- 11. Packing and transporting radioactive material;
- 12. Transporting radioactive material in transit via the Vietnamese territory;
- 13. Operating seagoing ships and other vehicles that are nuclear-powered;
- 14. Carrying out other activities which generate radioactive waste.

#### Article 19.- Reports on radiation job safety assessment

- 1. When applying for licenses to perform radiation jobs, organizations and individuals shall make reports on safety assessment of radiation jobs other than those specified in Clauses 1 and 8, Article 18 of this Law.
- 2. A report on radiation job safety assessment must be appropriate to each radiation job and has the following principal contents:
- a/ Procedures for performing the radiation job, covering steps of preparation for. commencement and completion of the job;
- b/ Regulations on measurement of individual irradiation doses and inspection of radiation at working places;
- c/ Regulations on recording of a diary on radiation job performance;
- d/ Rules on radiation job performance;
- e/ Anticipated potential incidents and response measures;
- f/ Responsibilities of individuals performing radiation jobs;
- g/ Responsibilities to supervise safety and conduct general administration.

## **Article 20.-** Reports on the actual state of safety of radiation job performance

- 1. On an annual basis or at the request of the radiation and nuclear safety agency, organizations and individuals performing radiation jobs shall make and send reports on the actual state of safety of radiation job performance to the radiation and nuclear safety agency.
- 2. A report on the actual state of safety of radiation job performance contains the following:

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- 2. A report on the actual state of safety of radiation job performance contains the following.
- a/ Satisfaction of conditions specified in the license:
- b/ Changes compared with the dossier of application for the license (if any);
- c/ Radiation incident(s) (if any) and response measures taken.

## Article 21.- Control of irradiation caused by radiation jobs

- 1. Control of irradiation covers:
- a/ Control of occupational irradiation, which means control of irradiation doses for radiation workers while performing a radiation job;
- b/ Control of medical irradiation, which means control of irradiation doses for patients in disease diagnosis and treatment;
- c/ Control of public irradiation, which means control of irradiation doses caused by a radiation job to persons other than those specified at Points a and b of this Clause.
- 2. Organizations and individuals that perform radiation jobs shall abide by the following irradiation control principles:
- a/ Ensuring that irradiation doses to the public and radiation workers do not exceed the dose limit; and that irradiation doses to patients are at guided levels;
- b/ Keeping individual irradiation doses, the number of irradiated persons and the possibility of irradiation exposure as low as reasonably achievable;
- c/ Ensuring that benefits brought about by radiation jobs are enough to offset risks and harms likely to be caused to human beings and the environment.

## Article 22.- Security of radioactive source, nuclear material and equipment

- 1. Organizations and individuals that have radioactive sources, nuclear material or equipment shall apply the following security measures:
- a/ Controlling access to their radioactive sources, nuclear material or equipment;
- b/ Disallowing unauthorized individuals to access their radioactive sources, nuclear material or equipment;
- c/ Enacting their licenses' provisions on control of radioactive sources, nuclear material or equipment;
- d/ Subjecting the transfer of radioactive sources or nuclear material within an radiation facility to written permission of the head of the facility or an authorized person, and recording the transfer in a minutes;
- e/ Conducting regular checking and counting at least once a year to ensure that their radioactive sources, nuclear material or equipment are properly placed under security conditions;
- f/ Keeping confidential security measures, unless otherwise provided for by law.
- 2. Apart from complying with the provisions of Clause 1 of this Article, organizations and individuals that manage radioactive sources of medium or higher level of danger, or manage nuclear material or equipment shall:
- a/ Work out security plans;
- b/ Promptly detect and prevent unauthorized access to radioactive sources, nuclear material or equipment;
- c/ Promptly apply necessary measures to recover radioactive sources, nuclear material or equipment which have been illegally appropriated, transferred or used:

- d/ Promptly prevent any sabotage against radioactive sources, nuclear material or equipment: work out plans on monthly, weekly or daily checking and counting under the guidance of the radiation and nuclear safety agency;
- e/ Adopt plans to mitigate hazards caused by sabotaged radioactive sources, nuclear material or equipment;
- f/ Keep confidential information on the security system, unless otherwise provided for by law.
- 3. The radiation and nuclear safety agency shall develop and regularly update an information system to control radioactive sources, nuclear material and equipment nationwide, containing the following information:
- a/ Types of radioactive sources, nuclear material and equipment;
- b/ Identification numbers of radioactive sources, nuclear material or equipment and protective containers:
- c/ Radioisotope names, for radioactive sources; chemical compositions, for nuclear material;
- d/ Radioactivity and date of radioactivity determination, for radioactive sources; amount of plutonium or uranium, for nuclear material;
- e/ Manufacturers or suppliers;
- f/ Certificates of origin;
- g/ Owners:
- h/ Organizations and individuals that are storing or using radioactive sources, nuclear material or equipment;
- ${\it i/}$  Organizations and individuals that previously stored or used radioactive sources, nuclear material and equipment;
- j/ Addresses of places where radioactive sources, nuclear material and equipment are stored or used.
- 4. The classification of radioactive sources according to their level of danger (below medium, medium or above medium) complies with national technical regulations.

## **Article 23.-** Multi-layer protection

- 1. Multi-layer protection means the simultaneous application of many protective measures or lines to maintain safety and security.
- 2. Organizations and individuals performing radiation jobs shall adhere to the principle of multi-layer protection corresponding to the harms caused by radioactive sources, nuclear material and equipment to human beings and the environment.

#### Article 24.- Radiation inspection of working places

- 1. Organizations and individuals performing radiation jobs shall conduct regular and systematic radiation inspection of their working places and measure necessary parameters to serve as a basis for safety assessment.
- 2. Machinery and equipment used for the radiation inspection and measurement must satisfy national technical regulations and be regularly maintained, tested and adjusted.
- 3. Organizations and individuals performing radiation jobs shall make, update and keep radiation inspection and measurement records and maintenance, testing and adjustment records.
- **Article 25.-** Disposal and storage of radioactive waste, used radioactive sources and spent nuclear fuel

- 1. Organizations and individuals that have radioactive waste shall comply with the following provisions:
- a/ To apply measures to minimize radioactive waste right at source:
- b/To separate radioactive waste from ordinary-waste in the course of collection and disposal;
- c/To devise plans on classification and disposal of radioactive waste.
- 2. Radioactive waste may be disposed of as follows:
- a/ Storage for disintegration, for radioactive waste with a short semi-disintegration period (half-life);
- b/ Burial, provided this burial does not effect human health and the environment;
- c/ Transformation into a form less harmful to human beings and the environment;
- d/ Temporary storage under safety and security conditions pending disposal in case solutions specified at Points a, b and c of this Clause cannot be applied.
- 3. Organizations and individuals that use nuclear fuel shall devise plans on disposal and storage of spent nuclear fuel under safety and security conditions.
- 4. Organizations and individuals shall declare radioactive waste, used radioactive sources and spent nuclear fuel generated from the performance of radiation jobs.
- 5. Organizations and individuals shall apply for licenses to provide radioactive waste storage services.
- 6. Organizations and individuals may only bury radioactive waste after being permitted by a competent state agency, reporting the state of burial and drawing and sending maps of burial sites to the radiation and nuclear safety agency
- 7. The State invests in building a national radioactive waste repository.
- 8. The classification and disposal of radioactive waste, used radioactive sources and spent nuclear fuel, and the selection of a location for building a national radioactive waste repository and radioactive waste burial site comply with national technical regulations.
- 9. The Construction Ministry shall approve locations of the national radioactive waste repository and radioactive waste burial sites under the approved planning and the environmental protection law.
- **Article 26.-** Responsibilities of heads of organizations or individuals licensed to perform radiation jobs
- 1. To bear responsibility for safety and security, and comply with this Law's provisions on performance of radiation jobs.
- 2. To arrange safety officers under regulations of the Science and Technology Ministry; to define in writing responsibilities and powers of safety officers.
- 3. To fully comply with the terms of their licenses.
- 4. To elaborate, and organize the implementation of safety and security rules and instructions.
- 5. To ensure safe working conditions and organize professional training, give regular health-checks and monitor irradiation doses for radiation workers.
- 6. To create conditions for examiners and inspectors to perform their tasks of examination and inspection of safety and security: to supply sufficient necessary information when requested by a competent state agency.
- 7 To organize radiation inspection and radioactive waste control ensuring that irradiation

- doses do not exceed the dose limit.
- 8. To work out, and organize the implementation of, plans on response to incidents at their facilities.

## Article 27.- Responsibilities of radiation workers

- 1. Radiation workers are persons who work in direct contact with radiation, have been professionally trained, and firmly grasp legal provisions on safety, having the following main responsibilities:
- a/ To observe relevant legal provisions and adhere to relevant national technical regulations and safety guidance as appropriate to each atomic energy activity;
- b/To use devices to monitor irradiation doses and protect themselves while performing radiation jobs, and take regular health-checks under instructions of safety officers; to refuse working when safety conditions are insufficient, except when participating in remedying radiation or nuclear incidents;
- c/ To promptly report to safety officers any abnormal events related to safety or security in the course of performance of radiation jobs;
- d/ To take measures to remedy radiation or nuclear incidents under instructions of safety officers.
- 2. Safety officers are radiation workers who have professional knowledge and skills and firmly grasp legal provisions on safety, having the following main responsibilities:
- a/To help heads of organizations or individuals licensed to perform radiation jobs comply with the provisions of Clauses 3,4,5,6,7 and 8, Article 26 of this Law;
- b/To help heads of organizations or individuals licensed to perform radiation jobs develop, and organize the application of, necessary technical solutions to satisfy safety and security conditions;
- c/To keep regular contact with individuals and sections that store and use radioactive sources, nuclear material and equipment within the ambit of their responsibilities; to provide consultancy and guidance on safety assurance; to regularly inspect the security of radioactive sources, nuclear material and equipment;
- d/ To report to heads of organizations or individuals licensed to perform radiation jobs upon detecting abnormal signs of safety and security or signs of radiation or nuclear incidents;
- e/ To compile and keep safety and security records.

## Article 28.- Radiation worker certificates

- 1. The following persons must have radiation worker certificates:
- a/ Chief engineers of nuclear reactors;
- b/ Heads of operation shifts of nuclear reactors;
- c/ Safety officers;
- d/ Persons in charge of radioactive decontamination;
- e/ Persons in charge of response to radiation incidents and nuclear incidents;
- f/ Persons managing nuclear fuel;
- d Operators of nuclear reactors:
- h/ Operators of accelerators:
- i/ Operators of irradiation equipment using radioactive sources;

- j/ Producers of radioisotopes;
- k/ Photographers of industrial radioactivity.
- 2. Persons who fully satisfy the following conditions will be granted radiation worker certificates specified in Clause 1 of this Article:
- a/ Having the full civil act capacity;
- b/ Having appropriate professional qualifications and knowledge about safety.
- 3. Certificate holders specified in Clause 1 of this Article shall constantly update relevant knowledge.

#### Article 29.- Radiation safety records

- 1. Organizations and individuals performing radiation jobs shall compile, regularly update and keep the following records:
- a/ Records of radioactive sources, nuclear material and equipment: changes, modifications or upgrading of radiation or nuclear equipment;
- b/ Radiation inspection and measurement records and maintenance, testing and adjustment records;
- c/ Diaries and records of incidents in the course of radiation job performance;
- d/ Training documents, health records and irradiation dose records of radiation workers;
- d Examination and inspection conclusions and documents on compliance with requests of competent agencies.
- 2. Organizations and individuals performing radiation jobs shall produce dossiers specified in Clause 1 of this Article to competent state management agencies at the latter's request.
- 3. Organizations and individuals performing radiation jobs shall transfer records specified in Clause 1 of this Article according to the following provisions:
- a/ Records are transferred to the radiation and nuclear safety agency when organizations and individuals performing radiation jobs terminate their operation;
- b/ Records specified at Points a and b. Clause 1 of this Article are transferred to new owners or users to which radioactive sources, nuclear material, radiation or nuclear equipment have been transferred;
- c/ Records specified at Points c and e, Clause 1 of this Article are transferred to the radiation and nuclear safety agency when radioactive sources, nuclear material, radiation or nuclear equipment are transferred to new owners or users:
- d/ Records specified at Point d, Clause 1 of this Article are transferred to new employing organizations and individuals for which/whom radiation workers are transferred to work.
- **Article 30.-** Handling of cases in which radioactive sources, nuclear material or equipment are lost, appropriated, abandoned, illegally transferred or left undeclared
- 1. Organizations and individuals that have their radioactive sources, nuclear material or equipment lost or appropriated shall promptly report such to the nearest local Peoples Committee or police office or the radiation and nuclear safety agency coordinate with the police office and concerned agencies, organizations and individuals in organizing the search for and recovery of these radioactive sources, nuclear material or equipment.
- 2. When discovering radioactive sources, nuclear material or equipment which have been lost, appropriated, abandoned, illegally transferred or left undeclared, organizations and individuals shall promptly report them to the nearest People's Committee or police office or the radiation and nuclear safety agency.

- 3. Upon receiving reports or notices specified in Clauses. 1 and 2 of this Article, People's Committees, police offices and the radiation and nuclear safety agency have the following responsibilities:
- a/ People's Committees shall notify such to local people so that they can proactively prevent themselves from irradiation, and join functional agencies in searching for lost, appropriated, abandoned or illegally transferred radioactive sources, nuclear material or equipment;
- b/ Police offices shall assume the prime responsibility for, and coordinate with the radiation and nuclear safety agency and concerned agencies, organizations and individuals in, searching for and identifying owners or managers of lost, appropriated or abandoned radioactive sources, nuclear material or equipment;
- c/ The radiation and nuclear safety agency shall assume the prime responsibility for, and coordinate with concerned agencies, organizations and individuals in. handling illegally transferred or undeclared radioactive sources, nuclear material or equipment; or handling lost, appropriated or abandoned radioactive sources, nuclear material or equipment which are now found.
- 4. Organizations and individuals that own or store radioactive sources, nuclear material or equipment shall bear all expenses for the search for and handling of their lost, appropriated, abandoned or illegally transferred radioactive sources, nuclear material or equipment; and shall, depending on the nature and seriousness of their violations, be disciplined, administratively sanctioned or examined for penal liability.

## Article 31.- Storage and disposal of radioactively contaminated objects

- 1.Radioactively contaminated objects are those having radioactive substances on their surface or in their composition.
- 2. Organizations and individuals that have radioactively contaminated objects shall:
- a/ Take measures to store or dispose of radioactively contaminated objects under regulations applicable to radioactive waste;
- b/ Ask for permission of the radiation and nuclear safety agency to take measures to dispose of radioactively contaminated objects in case the radioactive contamination level is lower than or equal to that eligible for disposal. When obtaining the disposal permission, conduct the disposal of radioactively contaminated objects like discharge of ordinary waste.

## **Article 32.-** Minimization of harms caused by natural irradiation to human beings

- 1. Natural irradiation means irradiation by radiation from the outer space and surrounding natural objects.
- 2. The Natural Resources and Environment Ministry and the radiation and nuclear safety agency shall identify places where natural irradiation is at a level harmful to human beings and intervention by competent authorities is needed; organize survey and assessment of possible harms; notify such to provincial-level People's Committees for coordination in working out plans and organizing the application of necessary measures to minimize harms to human beings.
- **Article 33.-** Responsibility to provide in detail for radiation safety, nuclear safety and security of radioactive sources, nuclear material and nuclear facilities
- 1. The Science and Technology Ministry shall provide for and guide in detail the following:
- a/ Dose limit, control of occupational irradiation and control of irradiation to the public;
- b/ Adherence to the principle of multi-layer protection;
- c/ Radiation inspection in the performance of radiation jobs;
- d/ Radioactive decontamination upon completion of radiation jobs;

- e/ Radiation jobs requiring safety officers;
- f/ Professional qualifications of and requirements of safety training for radiation workers;
- g/ Conditions, order and procedures for granting radiation worker certificates, valid terms and extension of these certificates, and recognition of radiation worker certificates granted by foreign organizations;
- h/ Reports on the state of radioactive waste burial and mapping of burial sites:
- i/ Contents of radiation safety records and the preservation duration for each type of record;
- j/ Disposal and storage of radioactive waste, used radioactive sources and spent nuclear fuel;
- k/ Level for exemption from declaration or licensing, level eligible for disposal, procedures for assessment, evaluation or approval, and measures to dispose of radioactive sources and radioactively contaminated objects;
- 1/ Identification of places where natural irradiation is at a level harmful to human beings and intervention by competent authorities is needed;
- m/ Regulations on the national radioactive waste repository, radioactive waste burial sites security and other matters falling within its competence.
- 2. The Health Ministry shall provide for and guide in detail the following:
- a/ Regular health-checks for radiation; workers;
- b/ Guided levels of irradiation doses for patients and control of medical irradiation.
- 3. The Labor, War Invalids and Social Affairs Ministry shall assume the prime responsibility for, and coordinate with concerned ministries and branches in, provide for and guide in detail salaries, working time, rest time, occupational allowances and other special entitlements for radiation workers and persons working in radioactively hazardous environments.

## **Chapter IV**

## **RADIATION FACILITIES**

#### Article 34.- Radiation facilities and their designs

- 1. Radiation facilities include:
- a/ Facilities operating accelerators:
- b/ Facilities engaged in radiotherapy:
- c/ Facilities engaged in irradiation for sterilization or treatment of materials;
- d/ Facilities producing or processing radioactive substances;
- e/ The national radioactive waste repository; facilities storing, disposing of or burying waste of a radioactivity ten thousand times higher than the level for exemption from declaration.
- 2. The building or changes in the size and operation scope of radiation facilities must be designed in compliance with national technical regulations.
- **Article 35.-** Reports on safety analysis and reports on safety assessment of radiation facilities
- 1. Radiation facilities shall make reports on safety analysis when applying for construction licenses, changing their operation scale and scope or terminating their operation.
- 2. Radiation facilities shall make reports on safety assessment when applying for licenses or renewed licenses to perform radiation jobs other than those specified in Article 18 of this Law.

- 3. A report on safety analysis upon application for a construction license has the following contents:
- a/ Design and manufacture:
- b/ Tentative plan on installation, test operation and pre-handover test;
- c/ Safety analysis when the facility is put into operation:
- d/ Tentative plan on operation termination, dismantlement and radioactive decontamination.
- 4. A report on safety assessment upon application for a license for change in operation scale and scope has the following contents:
- a/ Reason for the change in operation scale and scope;
- b/ Design and manufacture:
- c/ Tentative plan on installation, test operation and pre-handover test;
- d/ Safety analysis when the facility is put into operation;
- e/ Tentative plan on operation termination, dismantlement and radioactive decontamination.
- 5. A report on safety analysis upon application for a license for operation termination has the following contents:
- a/ Reason for operation termination;
- b/ Plan on dismantlement and radioactive decontamination;
- c/ Plan on disposal of radiation source or radioactive waste.
- 6. Safety analysis reports shall be made for each radiation job according to Article 19 of this Law.

#### Article 36.- Dismantlement and radioactive decontamination of radiation facilities

- 1. When terminating its operation, a radiation facility shall submit to the radiation and nuclear safety agency for approval a plan on dismantlement, radioactive decontamination and disposal of its radiation source or radioactive waste, and organize the implementation of the approved plan.
- 2. The radiation and nuclear safety agency shall organize the inspection of the dismantlement, radioactive decontamination and disposal of radiation sources and radioactive waste, and issue decisions to recognize the radiation facility's discharge of the responsibility to assure safety.
- 3. Radiation facility shall bear all expenses for the dismantlement and storage or disposal of radioactive wastes generated in the process of dismantlement.
- 4. The dismantlement, radioactive decontamination and disposal of radiation sources and radioactive waste comply with national technical regulations.
- 5. The Science and Technology Ministry shall specify the order and procedures for the evaluation and approval of radiation facilities' plans on dismantlement, radioactive decontamination and disposal of radiation sources and radioactive waste.

## **Chapter V**

## **NUCLEAR FACILITIES**

#### Section I. GENERAL PROVISIONS ON NUCLEAR FACILITIES

**Article 37.-** Nuclear facilities and their designs

- 1. Nuclear facilities include:
- a/ Research nuclear reactors;
- b/ Nuclear power plants;
- c/ Facilities that enrich uranium or produce nuclear fuel;
- d/ Facilities that store, dispose of or bury spent nuclear fuel.
- 2. The building or changes in the size and operation scope of nuclear facilities must be designed in compliance with national technical regulations.

The Science and Technology Ministry shall organize the evaluation of designs of nuclear facilities other than nuclear power plants.

## Article 38.- Approval of locations of nuclear facilities

- 1. Locations of nuclear facilities must be approved before or at the same time with the filing of applications for construction licenses. A dossier of request for approval of a building location comprises the following documents:
- a/ Application for approval of the location:
- b/ General report on the selection of the location;
- c/ Preliminary design of the nuclear facility;
- d/ Report on environmental impact assessment;
- e/ Evaluation results of the report on environmental impact assessment;
- f/ Preliminary safety analysis report:
- g/ Safety assessment report;
- h/ Plan on radiation inspection of earth, air, ground water and surface water environments in the area to be affected by the facility's operation.

The selection of locations of nuclear facilities must be based on national technical regulations.

2. The Science and Technology Ministry shall approve locations of nuclear facilities other than nuclear power plants.

**Article 39.-** Reports on safety analysis and reports on safety assessment of nuclear facilities

- 1. Nuclear facilities shall make reports on safety analysis when applying for construction licenses, changing their operation scale and scope, terminating their operation, or operating research nuclear reactors or nuclear power plants.
- 2. Nuclear facilities shall make reports on safety assessment when applying for licenses or renewed licenses to perform radiation jobs specified in Article 18 of this Law other than operation of research nuclear reactors or nuclear power plants.
- 3. The Science and Technology Ministry shall specify contents of safety analysis and reports on safety assessment of nuclear facilities.
- **Article 40 -** Dismantlement and radioactive decontamination of nuclear facilities, disposal of nuclear fuel and equipment and radioactive waste
- 1. When terminating its operation, a nuclear facility shall submit to the radiation and nuclear safety agency for approval a plan on dismantlement radioactive decontamination and disposal of nuclear fuel and equipment or radioactive waste, and organize the implementation of the approved plan.
- 2. The radiation and nuclear safety agency shall organize the inspection of the

dismantiement, radioactive decontamination and disposal of nuclear rule and equipment or radioactive waste, and issue decisions to recognize the nuclear facilities' discharge of the responsibility to assure safety.

- 3. Nuclear facilities shall bear all expenses for the dismantlement and storage or disposal of radioactive waste generated from the dismantlement.
- 4. The dismantlement, radioactive decontamination and disposal of nuclear fuel and equipment or radioactive waste comply with national technical regulations.
- 5. The Science and Technology Ministry shall specify the order of and procedures for the evaluation and approval of nuclear facilities" plans on dismantlement, radioactive decontamination and disposal of nuclear fuel and equipment or radioactive waste.

#### **Section 2. RESEARCH NUCLEAR REACTORS**

## Article 41.- Building and operation of research nuclear reactors

- 1. A dossier of application for a license to construct a research nuclear reactor comprises:
- a/ Application for a construction license;
- b/ Detailed design of the nuclear reactor and related works;
- c/ Report on environmental impact assessment;
- d/ Results of evaluation of the report on environmental impact assessment;
- e/ Safety analysis report;
- f/ Process of ensuring construction-related quality;
- g/ Plan on dismantlement of the nuclear reactor;
- h/ Safety assessment report;
- i/ Other related documents.
- 2. Research nuclear reactors shall obtain test operation permits before they are fed with fuel.
- 3. The test operation of a research nuclear reactor must be conducted at a low capacity level concurrently with the checking of technical norms and operational limit and gradual increase of its capacity to the designed level. Upon applying for construction licenses, organizations having research nuclear reactors shall make nuclear reactor test operations reports and safety analysis reports, clearly explaining changes in technical parameters and operational limits compared with designs, and send them to the radiation and nuclear safety agency.
- 4. The radiation and nuclear safety agency shall evaluate research nuclear reactor test operation reports and safety analysis reports, then propose the Science and Technology Ministry to grant official licenses for operation of research nuclear reactors.
- 5. The Science and Technology Ministry shall grant licenses for construction and licenses for operation of research nuclear reactors.
- **Article 42.-** Safety inspection of construction or change in operation scale and scope of research nuclear reactors
- 1. The radiation and nuclear safety agency shall organize safety inspection of the construction or change in the operation scale and scope of a research nuclear reactor and may request the investor to suspend or temporarily stop the construction if it detects any detail of the reactor under construction which is different from design and shall bear responsibility before law for its decision.
- 2. When conducting an inspection under Clause 1 of this Article, the radiation and nuclear safety agency may request the investor to supply documents and reports on the following:
- a/ Canability professional qualifications and skills of organizations or individuals responsible

- for construction and construction supervision:
- b/ Time for the pre-handover test of each construction stage;
- c/ Observance of safety regulations in the course of construction of the research nuclear reactor.
- 3. The investor, organizations or individuals responsible for construction shall create conditions for competent state management agencies to conduct a site inspection of compliance with the approved design.
- **Article 43.-** Inspection of installation test operation and pre-handover test of safety of research nuclear reactors
- 1. The radiation and nuclear safety agency shall organize safety inspection of the installation, test operation and pre-handover test of research nuclear reactors.

The inspection of installation or test operation shall be conducted for each construction item for which preliminary pre-handover test conclusions has been made before the test operation of the next construction item or the whole system is permitted and a pre-handover test is conducted.

- 2. The radiation and nuclear safety agency that organizes inspection under Clause 1 of this Article may request construction investors to supply documents and report on the following
- a/ Process and schedule of installation, test operation and pre handover test:
- b/ Observance of safety regulations in the course of installation, test operation and pre-handover test.
- 3. The overall pre-handover test of research nuclear reactors may only be conducted after all construction items are tested.

**Article 44.-** Protection and observation of environmental radioactivity of research nuclear reactors

- 1. Organizations that have research nuclear reactors shall:
- a/ Organize strict protection and control of persons and vehicles entering and leaving nuclear reactor areas;
- b/ Establish restricted areas and safety protection areas surrounding nuclear reactors;
- c/ Conduct observation of environmental radioactivity in the locations of nuclear reactors, biannually report to the radiation and nuclear safety agency on observation results, and immediately report on abnormal observation results.
- 2. The protection of research nuclear reactors complies with legal provisions applicable to works important to national security.

#### **Section 3. NUCLEAR POWER PLANTS**

**Article 45.-** Requirements on nuclear power plants

- 1. A nuclear power plant means a complex of works, including a nuclear reactor and other affiliated works.
- 2. Investment in building nuclear power plants must be in line the planning on nuclear power development already approved by the Prime Minister.
- 3. The selection and approval of locations, designing, building, installation, operation and assurance of safety of nuclear power plants comply with the provisions of this Law and other relevant laws.

**Article 46.-** Decision on policies on investment in building nuclear power plants

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- 1. The Government shall submit to the National Assembly for consideration and decision policies on investment in building nuclear power plants.
- 2. A dossier of a nuclear power plant project to be submitted to the National Assembly comprises:
- a/The Government's written exposition;
- b/ Pre-feasibility report (investment report);
- c/ Report of the State Evaluation Council;
- d/ Other relevant documents.

#### Article 47.- Locations of nuclear power plants

- 1. The location of a nuclear power plant must satisfy the following basic requirements;
- a/ Assuring safety for local people;
- b/ Assuring safety of operation of the nuclear power plant, with geological, hydrological, natural disaster, transport and other factors taken into consideration;
- c/ Assuring security for operation of the nuclear power plant;
- d/ Mitigating consequences upon occurrence of an incident.
- 2. A dossier on the location of a nuclear power plant to be submitted to the Prime Minister for approval comprises:
- a/ Application for approval of the location;
- b/ General report on the location selection;
- c/ Preliminary design of the nuclear power plant;
- d/ Environmental impact assessment report; e/ Results of evaluation of the report on environmental impact assessment;
- f/ Preliminary safety analysis report;
- g/ Safety assessment report;
- h/ Plan on radiation inspection of earth, air, ground water and surface water environments in the area to be affected by the operation of the nuclear power plant;
- i/ Report of the State Evaluation Council;
- j/ Resolution of the provincial-level People's Council of the locality in which the nuclear power plant is planned to be located, stating local people's opinions on measures to assure safety and security, policies on investment in technical infrastructure construction, development of culture, education and social welfare in order to ensure harmony between the interests of the State and the investors and local people's benefits;
- k/ Other relevant documents

#### **Article 48.-** Investment projects on building nuclear power plants

- 1. An investment project on building a nuclear power plant must be formulated, evaluated and approved under the construction, investment and bidding laws.
- 2. Apart from complying with the provisions of Clause 1 of this Article, a dossier of an investment project on building a nuclear power plant to be submitted by the investor to the Prime Minister must contain the following documents:
- a/ Application for a construction investment license;

- b/ Detailed design of the nuclear power plant;
- c/ Environmental impact assessment report;
- d/ Results of evaluation of the environmental

impact assessment report:

- e/ Safety analysis report:
- f/ Process for assuring construction-related quality;
- g/ Plan on dismantlement of the nuclear power plant and payment of dismantlement expenses; management of spent nuclear fuel and radioactive waste;
- h/ Safety assessment report;
- i/ Report of the State Evaluation Council;
- j/ Other relevant documents.

## Article 49.- Construction of nuclear power plants

- 1. A nuclear power plant may only be constructed after the Prime Minister approves its location and investment project under Articles 47 and 48 of this Law.
- 2. Investors and organizations constructing nuclear power plants shall comply with national technical regulations and assure nuclear safety under this Law and other relevant provisions of law.

## Article 50.- Operation of nuclear power plants

- 1. A nuclear power plant must obtain a test operation license before fuelling its nuclear reactor.
- 2. The test operation of a nuclear power plant must be conducted at a low-capacity level concurrently with the checking of technical norms and operational limit and gradual increase of its capacity to the designed level. Organizations having nuclear power plants shall make reports on test operation and reports on safety analysis of nuclear power plants, clearly explaining changes in technical norms and operational limits compared with their designs submitted upon applying for construction licenses, then send them to the radiation and nuclear safety agency.
- 3. The radiation and nuclear safety agency shall evaluate reports on test operation results and reports on safety analysis of nuclear power plants, and propose the National Council for Nuclear Safety to assess evaluation results and issue licenses for official operation of nuclear power plants.
- **Article 51,-** Inspection of safety in construction, change in operation scale and scope, installation, test operation and pre-handover safety test of nuclear reactors of nuclear power plants
- 1. The inspection of safety in construction, change in the operation scale and scope, installation, test operation and pre-handover safety test of nuclear reactors of nuclear power plants shall be conducted under the provisions of Articles 42 and 43 of this Law.
- 2. The radiation and nuclear safety agency shall report to the National Council for Nuclear Safety on results of safety inspection specified in Clause 1 of this Article.
- **Article 52.** Protection and observation of environmental radioactivity of nuclear power plants

The protection and observation of environmental radioactivity of nuclear power plants comply with Article 44 of this Law.

Article 53.- Regular inspection of safety and security of nuclear power plants

- 1. The radiation and nuclear safety agency shall set up inspection offices at nuclear power plants to regularly inspect safety and security of these nuclear power plants.
- 2. Organizations having nuclear power plants shall create conditions for the radiation and nuclear safety agency to conduct inspections specified in Clause 1 of this Article.

## Article 54.- Reports on the actual state of safety of nuclear power plants

- 1. Organizations having nuclear power plants shall make reports on the actual state of safety, which must have the contents specified in Clause 2, Article 20 of this Law, and send them to the radiation and nuclear safety agency according to the following provisions:
- a/ Annual reports or reports made at the request of the radiation and nuclear safety agency;
- b/ General reports made once every ten years;
- 2. General reports specified at Point b, Clause 1 of this Article must propose the duration in which nuclear power plants are allowed to continue operating.

#### Article 55.- Handling of results of safety inspection and assessment of nuclear power plants

- 1. Upon detecting safety or security loopholes, the radiation and nuclear safety agency may request nuclear power plants to apply remedial measures. In case of serious violation of safety and security regulations, they shall propose competent state agencies to stop operation of violating plants.
- 2. Based on general reports specified at Point b. Clause 1, Article 54 of this Law and safety assessment reports of the radiation and nuclear safety agency, competent state agencies shall consider the extension of nuclear power plant operation licenses.

**Article 56.-** Responsibility of organizations having nuclear power plants to ensure sufficient personnel

- 1. To ensure sufficient personnel who are fully qualified and have necessary skills for safely operating nuclear power plants, managing nuclear fuel, storing and disposing of radioactive waste and dismantling nuclear power plants.
- 2. To organize the training and re-training of nuclear power plant operators.
- 3. To appoint qualified persons to the post of chief engineer, head of operation shift, manager of nuclear fuel or safety officer.

## Article 57.- Public information

The Industry and Trade Ministry shall assume the prime responsibility for, and coordinate with the Science and Technology Ministry, the Information and Communication Ministry and provincial-level People's Committees of localities where nuclear power plants are located and organizations having nuclear power plants in, organizing the following:

- 1. Propaganda and supply of information for raising public awareness about nuclear power plants;
- 2. Propaganda and popularization of knowledge on safety among people in localities where nuclear power plants are located:
- 3. Regular supply of information on the actual state of safety of nuclear power plants to people in localities where nuclear power plants are located.

#### Chapter VI

## EXPLORATION, EXPLOITATION AND PROCESSING OF RADIOACTIVE ORES

**Article 58.-** Safety assessment reports of establishments exploring, exploiting or processing

#### rauroactive ores

- 1. Establishments exploring, exploiting or processing radioactive ores are those conducting one or several of the following activities:
- a/ Exploring, exploiting and processing uranium and thorium ores;
- b/ Exploiting and processing other minerals with byproducts or post-processing wastes containing radioactive substances of a radioactivity ten thousand times higher than the level of exemption from declaration.
- 2. Establishments exploring, exploiting or processing radioactive ores shall make and submit safety assessment reports specified in Article 19 of this Law to the radiation and nuclear safety agency for evaluation.
- 3. Apart from the contents specified in Clause 2, Article 19 of this Law, a safety assessment report of an establishment exploring, exploiting or processing radioactive ores must also have the following contents: exploration, exploitation and processing processes: storages; measures to reduce radioactive dust; measures to ensure ventilation and reduce the concentration of radon and other toxic gases: packaging, storing and transportation of products containing radioactive substances; collection, disposal and storage of radioactive waste.
- **Article 59.-** Responsibility of establishments exploring, exploiting or processing radioactive ores to rehabilitate the environment
- 1. To apply measures to minimize adverse impacts on the environmental elements; to rehabilitate the environment upon completion of each stage or the whole exploration, exploitation and processing process under the Mineral Law and the Environmental Protection Law. and assure radiation safety under this Law; to make maps of areas in which ore exploitation or processing is no longer conducted.
- 2. To report to the state management agencies on results of application of measures specified in Clause 1 of this Article.

#### **Chapter VII**

## TRANSPORTATION, IMPORT AND EXPORT OF RADIOACTIVE MATERIAL AND NUCLEAR EQUIPMENT

#### **Section 1. TRANSPORTATION**

Article 60.- Requirements on organizations and individuals transporting radioactive material

- 1. Organizations and individuals may only transport radioactive material after being licensed by competent state management agencies.
- 2. Transporting organizations and individuals may not refuse to transport radioactive material already packaged under Article 61 of this Law and satisfying all conditions for transportation under law.

### **Article 61.-** Packaging of radioactive materials for transportation

- 1. Before being transported, radioactive materials must be packaged to assure their safety during transportation.
- 2. Radioactive packages must be designed, manufactured and tested to assure their safety level corresponding to the level of danger of radioactive material and may only be used after obtaining permission of competent state management agencies.
- 3. Radioactive packages may be used to contain only radioactive materials and necessary proof documents and objects related to the transported radioactive material.
- 4. The packaging of radioactive materials for transportation must comply with national technical regulations.

- **Article 62.-** Plans on assurance of safety and security and plans on response to incidents during transportation
- 1. When transporting radioactive material, organizations and individuals shall work out and implement plans on safety and security assurance, satisfying the following requirements:
- a/ To devise plans on protection of safety for persons directly involved in the transportation and other related persons; and to check the radioactive contamination of packages, areas where radioactive packages are prepared, warehouses and vehicles: compile and preserve checking dossiers;
- b/ Persons involved in the transportation must be trained and provided with updated knowledge about radiation safety and knowledgeable about fire protection rules and regulations on safe transportation of radioactive material:
- c/ To work out and control the transportation itinerary; to prevent loss, misappropriation or destruction of radioactive material.
- 2. hen transporting radioactive material, organizations and individuals shall work out plans on response to a facility-level incident, satisfying the following requirements:
- a/To specify tasks of sections and individuals upon the occurrence of an incident;
- b/ To make an emergency notification of the incident to competent agencies;
- c/ To apply necessary measures and technical devices to respond to the incident;
- d/ To issue a warning to inhabitants in areas surrounding the incident site;
- e/ To zone off the radioactively contaminated area for segregation, prevent any access to this area and remedy the radioactive contamination;

f/To give first aid to victims.

- 3. Plans on response to incidents in the transportation of radioactive substances or waste of an above-medium level of danger and the transportation of nuclear material must be maneuvered and evaluated by state management agencies competent to license the transportation.
- 4. The Science and Technology Ministry shall guide in detail the elaboration of plans on assurance of safety and security and plans on response to incidents in the transportation of radioactive material.
- **Article 63.-** Responsibilities of organizations and individuals involved in transportation
- 1. Responsibilities of consignors:
- a/To apply for licenses to transport radioactive material;
- b/ To package radioactive material for transportation under Article 61 of this Law;
- c/ To inform transporting organizations and individuals of safety and security requirements, and supply documents relevant to transported goods;
- d/ To coordinate with transporting organizations and individuals in guiding transportation staff in observing the terms of transportation licenses and contracts;
- e/ To keep consignment documents
- 2. Responsibilities of transporters:
- a/ To check safety conditions of consigned goods under regulations;
- b/To comply with the terms of transportation licenses and contracts; to undertake to transport goods only if these goods are accompanied with valid documents and properly packaged to assure safety in transportation and all procedures for these goods have been

#### completed;

- c/To coordinate with consigning organizations and individuals in guiding transportation staff in observing the terms of transportation licenses and contracts;
- d/ To promptly report to the radiation and nuclear safety agency on unclaimed radioactive packages.
- 3. Responsibilities of consignees:
- a/ To coordinate with consignors and transporters in receiving safely and in time radioactive packages in order to swiftly release these packages from places of delivery;
- b/ To join involved organizations and individuals in mitigating incident consequences:
- c/ To report promptly to consignors and the radiation and nuclear safety agency upon detecting that received goods are different in category and quantity from those stated in transportation contracts, or radioactive packages show signs of deterioration, unpacking or radioactive leakage.
- 4. Responsibilities of organizations and individuals storing radioactive packages at entrepot warehouses:
- a/ To coordinate with transporters and consignees in receiving safely and in time radioactive packages in order to swiftly release these packages from places of delivery;
- b/ To join involved parties in mitigating incident consequences;
- c/ To report promptly to the radiation and nuclear safety agency upon detecting that radioactive packages show signs of deterioration, unpacking or radioactive leakage; or on unclaimed radioactive packages.
- 5. Organizations and individuals involved in the transportation shall implement plans on safety and security assurance and response to incidents as specified in Article 62 of this Law.
- **Article 64.-** Safety control of transit transportation of radioactive material and operation of seagoing ships and other vehicles that are nuclear-powered

The transportation of radioactive materials transiting the Vietnamese territory, operation of seagoing ships and other vehicles that are nuclear-powered in the Vietnamese territory must be permitted by the Prime Minister and supervised by competent state management agencies.

#### **Section 2. IMPORT AND EXPORT**

Article 65.- Control of import and export of radioactive material and nuclear equipment

- 1. The import and export of radioactive material and nuclear equipment must comply with the following provisions:
- a/ Radioactive material and nuclear equipment may only be imported or exported under licenses issued by competent state management agencies;
- b/ Radioactive material must be packaged under Article 61 of this Law.
- 2. Customs offices shall prioritize the custom clearance of radioactive material which fully satisfies the conditions specified in Clause 1 of this Article. Any violation shall, depending on its nature and seriousness and consequences caused, be handled under law.
- 3. Organizations and individuals that import radioactive material and nuclear equipment in violation of Clause 1 of this Article shall, depending on the nature, seriousness and consequences of their violations, be forced by competent state management agencies to remedy their violations before customs clearance, reexport the imported goods or have their goods confiscated.
- 4. Organizations and individuals that export radioactive material and nuclear equipment in violation of Clause 1 of this Article shall, depending on the nature, seriousness and

consequences of their violations, be forced by competent state management agencies to remedy their violations before customs clearance.

- 5. The Government shall specify a mechanism for coordination among customs offices, the radiation and nuclear safety agency and concerned agencies in controlling the import and export of radioactive material and nuclear equipment at border gates.
- **Article 66.-** Control of import of consumer goods which have been irradiated or contain radioactive substances
- 1. Consumer goods which have been irradiated and are not on the list of goods permitted for import or which are on such list but have been excessively irradiated or which contain radioactive substances in excess of the prescribed level are not permitted for import.
- 2. Consumer goods which have been irradiated or contain radioactive substances permitted for export must have labels clearly stating the irradiation or contained radioactive substances.
- 3. The Health Ministry shall specify a list of consumer goods which have been irradiated or contain radioactive substances permitted for export and the permitted radiation level applicable to consumer goods on the basis of results of safety assessment by the radiation and nuclear safety agency.
- **Article 67.-** Control of imported goods suspected of containing radioactive substances or being radioactively contaminated
- 1. The radiation and nuclear safety agency shall coordinate with customs offices in applying necessary measures to detect and inspect imported goods suspected of containing radioactive substances or being radioactively contaminated.
- 2. Upon detecting imported goods which contain radioactive substances or are radioactively contaminated, customs offices shall stop carrying out customs clearance procedures and notify such to goods owners for handling with the following measures:
- a/ Immediately applying necessary measures to assure safety in order to minimize harms to human beings and the environment;
- b/ Applying measures to remove radioactive substances from or decontaminate the goods, except for the case of immediate re-export.
- 3. Customs offices shall coordinate with the radiation and nuclear safety agency in controlling the application of measures specified in Clause 2 of this Article.
- 4. After applying measures specified at Point b, Clause 2 of this Article, if the goods satisfy the conditions for import, customs clearance procedures may be resumed. If such goods still fail to satisfy the conditions for import, they shall be re-exported.
- 5. Goods owners shall mitigate all consequences caused at ports by imported goods which contain radioactive substances or are radioactively contaminated.

#### **Chapter VIII**

## ATOMIC ENERGY APPLICATION SERVICES

Article 68.- Atomic energy application services

- 1. Technical and technological consultancy in the domain of atomic energy.
- 2. Assessment, appraisal and verification of radiation and nuclear technologies.
- 3. Training of radiation workers: organization of training and retraining courses at the request of organizations and individuals performing radiation jobs.
- 4. Installation, maintenance and repair of radiation and nuclear equipment.

- 5. Measurement of individual irradiation doses and assessment of radioactivity.
- 6. Inspection and calibration of radiation recording and measuring devices, radiation and nuclear equipment.
- 7. Radioactive decontamination.
- 8. Replacement and renewal of fuel for nuclear reactors.
- 9. Installation of radioactive sources.
- 10. Other support services.

#### Article 69.- Conditions for provision of atomic energy application services

- 1. An organization providing atomic energy application services shall satisfy the following conditions:
- a/ Being established and operating under law.
- b/ Having at least two persons possessing practice certificates for providing atomic energy application services;
- c/ Having physical and technical foundations meeting the requirements of registered service operations.
- 2. Individuals being independent providers of atomic energy application services must possess service-providing practice certificates.
- 3. Organizations and individuals providing atomic energy application services shall register their operations under regulations of the Science and Technology Ministry.

## Article 70.- Practice certificates for providing atomic energy application services

- 1. An individual that fully satisfies the following conditions may be issued a practice certificate for providing atomic energy application services:
- a/ Having the full civil act capacity;
- b/ Having appropriate professional qualifications and working experience;
- c/ Having been trained in provision of atomic energy application services at a training establishment.
- 2. Certificate holders specified in this Article shall constantly update relevant knowledge.
- 3. The Science and Technology Ministry shall specify establishments training providers of atomic energy application services; the issuance and withdrawal of practice certificates for providing atomic energy application services and the recognition of such certificates issued by foreign organizations.
- **Article 71.-** Rights and obligations of organizations and individuals providing atomic energy application services
- 1. Organizations and individuals providing atomic energy application services have the following rights:
- a/To conduct registered operations;
- b/ To request service users to supply information and documents necessary for the provision of services;
- c/ To employ domestic and foreign collaborators in providing services;
- d/ To receive service charges as agreed upon;
- e/ To request service users to compensate for damage caused by service users to them;

- f/ To cooperate or enter into joint ventures with domestic and foreign organizations and individuals in providing services:
- g/ To join in domestic, regional and international professional associations in accordance with law.
- 2. Organizations and individuals providing atomic energy application services have the following obligations:
- a/ To provide services in accordance with registered contents:
- b/ To perform service contracts already concluded;
- c/To be responsible to service users for results of services they provide;
- d/To compensate for damage caused by them to service users;
- e/ To fulfill financial obligations and other obligations under law;
- f/ To promptly notify service users and the radiation and nuclear safety agency of any risk of occurrence of a radiation or nuclear incident.

#### **Chapter IX**

#### **DECLARATION AND LICENSING**

**Article 72.-** Declaration of radioactive substances, radiation equipment nuclear material and nuclear equipment

- 1. Organizations and individuals having radioactive substances or waste of a radioactivity above the level for exemption from declaration: radiation equipment of a capacity above the level for exemption from declaration; nuclear source material, nuclear material and nuclear equipment shall declare them to the radiation and nuclear safety agency on their quantity, category, characteristic and origin, and supply other information as specified in Clause 3, Article 22 of this Law.
- 2. Declaration must be made within seven working days after declarants process radioactive material, radiation equipment or nuclear equipment.

## Article 73.- Licenses to perform radiation jobs

- 1. Organizations and individuals performing radiation jobs must be licensed, except for cases specified in Clause 2 of this Article.
- 2. Organizations and individuals may perform the following radiation jobs without a license:
- a/ Producing, processing, importing, exporting, packaging, transporting, storing or using radioactive substances of a radioactivity at or below the level for exemption from licensing;
- b/ Using radioactive sources or radiation equipment on the list of these for which licenses are not required.

#### **Article 74.-** Term of licenses to perform radiation jobs

- 1. Licenses for multiple import or export of radioactive sources of under-medium danger level are valid for twelve months.
- 2. Licenses for single import or export of radioactive sources of medium danger level or higher, nuclear material and equipment are valid for six months.
- 3. Licenses for foreign organizations and individuals to transport radioactive material in transit via the Vietnamese territory: and licenses for nuclear-powered seagoing ships and other vehicles to operate in the Vietnamese territory are valid for six months.
- 4. Licenses for nuclear-powered seagoing ships and other vehicles of domestic organizations

and individuals are valid for ten years.

- 5. Licenses to operate research nuclear reactors or nuclear power plants are valid for ten years.
- 3. Licenses to operate irradiation equipment are valid for five years.
- 7. Licenses to perform other radiation jobs are valid for three years.

#### Article 75.- Licensing conditions

- 1. An organization that fully satisfies the following conditions may be licensed to perform radiation jobs:
- a/ Being established under law;
- b/ Performing radiation jobs suitable to its operating functions;
- c/ Having qualified staff and appropriate physical-technical foundation;
- d/ Fully satisfying the conditions for assurance of safety and security for each radiation job specified in this Law;
- e/ Having completed the dossier and procedures for applying for a license under this Law and other relevant laws.
- 2. An individual who fully satisfies the following conditions may be licensed to perform radiation jobs:
- a/ Having the full civil act capacity;
- b/ Performing radiation jobs in accordance with his/her practice or business registration:
- c/ Having appropriate professional qualifications:
- d/ Fully satisfying the conditions for assurance of safety and security for each radiation job specified in this Law;
- e/ Having completed the dossier and procedures for applying for a license under this Law and other relevant laws.

#### Article 76.- License application dossiers

- 1. A dossier of application for a license to perform radiation jobs comprises the following documents:
- a/ Application for a license;
- b/ Quantity, category, characteristics, origin and use purpose of the radioactive substance, radiation equipment, nuclear material or equipment;
- c/ Documents evidencing sufficient and qualified personnel; plan on personnel training;
- d/ Safety assessment or safety analysis report for each specific radiation job;
- e/ Process of quality assurance;
- f/ Plan on response to a radiation or nuclear incident for each specific radiation job:
- g/ Planned record-keeping and reporting systems.
- 2. A dossier of application for a license to dispose of or store radioactive waste, used radioactive sources and spent nuclear fuel comprises the documents specified in Clause 1 of this Article and the following documents:
- a/ Expected quantities, categories, characteristics of radioactive waste, used radioactive sources and spent nuclear fuel to be stored or disposed of;

- b/ Methods of and equipment for disposing of radioactive waste, used radioactive sources and spent nuclear fuel;
- c/ Anticipated emissions into the environment and plan on radiation inspection of the environment;
- d/ Planned research and development activities in support of the disposal or storage of radioactive-waste, used radioactive sources and spent nuclear fuel at the disposal or storage facility;
- e/ Planned storage and burial places.
- 3. A dossier of application for a license to explore, exploit or process radioactive ores comprises the documents specified in Clause 1 of this Article and the following documents:
- a/ Map of the area in which the ore exploration, exploitation or processing is to be conducted:
- b/ Planned place for storing waste from the exploration, exploitation or processing; waste disposal method(s) and equipment;
- c/ Planned measures for and plan on environmental rehabilitation after the completion of each stage and the whole process of exploration, exploitation or processing.
- 4. A dossier of application for a license to transport radioactive material comprises the documents specified in Clause 1 of this Article and the following documents:
- a/ Documents evidencing the satisfaction of safety and security requirements by transport vehicles:
- b/ Detailed description of goods packages: c/ Measures to fix radioactive material inside a package, package covers and packages on transport vehicles;
- d/ Maximum irradiation dose ratio on the surface of a package and surrounding area within one meter from a package;
- e/ Documents evidencing the assurance of safety of radioactive material contained in a package under normal conditions as well as upon occurrence of an incident;
- f/ Transportation contract. -
- 5. A dossier of application for a license to import or export radioactive material or nuclear equipment comprises the documents specified in Clause 1 of this Article and the following documents:
- a/ Information on organizations and individuals using radioactive material or nuclear equipment;
- b/ Import or export contract, clearly stating responsibilities of parties involved in import or export.

#### **Article 77.-** Licensing competence, order and procedures

- 1. Licensing competence is provided for as follows:
- a/ The Science and Technology Ministry issues licenses to perform radiation jobs, except for the cases specified at Points b, c and d of this Article;
- b/ Provincial-level People's Committees issue licenses to use X-ray equipment in medical diagnosis:
- c/ The Natural Resources and Environment Ministry issues licenses to explore, exploit and process radioactive ores on the basis of results of safety assessment by the radiation and nuclear safety agency:
- d/ The Industry and Trade Ministry issues licenses to conduct test operation and official

Ministry and the National Council for Nuclear Safety.

- 2. After receiving complete and valid dossiers, competent state agencies specified in Clause 1 of this Article shall consider and issue licenses within the following time limits:
- a/ Fifteen working days, for import or export:
- b/ Thirty days, for X-ray equipment for medical use;
- c/ Sixty days, for other radiation jobs, except for licenses to operate research nuclear reactors and licenses to operate nuclear power plants.
- 3. In case of refusal to issue licenses, state management agencies competent to issue licenses shall, within the time limits specified in Clause 2 of this Article, reply applicants in writing, clearly stating the reason.

## **Article 78.** Modification, supplementation, extension or re-issuance of licenses

- 1. Organizations and individuals that wish to have their licenses to perform radiation jobs modified, supplemented, extended or re-issued shall send dossiers of application to competent state agencies.
- 2. Organizations and individuals shall send dossiers of application for license extension at least one hundred and eighty days before the expiration of licenses to operate nuclear reactors or nuclear power plants, or sixty days before the expiration of licenses for other radiation jobs.
- 3. Dossiers, order and procedures for modifying, supplementing, extending or reissuing licenses comply with Articles 41,47,48. 55,64, 76 and 77 of this Law.
- 4. State management agencies competent to issue licenses may modify, supplement, extend and re-issue licenses.

#### Article 79.- Withdrawal of licenses

- 1. Organizations and individuals have their licenses to perform radiation jobs withdrawn in the following cases:
- a/ They seriously violate the provisions on safety and security conditions;
- b/ They violate the provisions of safety and security conditions and fail to remedy their violations within time limits prescribed by competent state agencies;
- c/ They are administratively sanctioned for violations of the safety and security provisions for the second time within twelve months;
- d/ They are forced to terminate the performance of radiation jobs under law;
- e/They wish to terminate the performance of radiation jobs.
- 2. Organizations and individuals that have their licenses withdrawn for violation of safety and security provisions may only be considered for re-issuance of licenses twenty four months after the license withdrawal.
- 3. State management agencies competent to issue licenses may withdraw these licenses.

#### Article 80.- Charges and fees

- 1. Organizations and individuals that apply for issuance, re-issuance, extension, amendment or supplementation of their licenses shall pay charges and fees prescribed by law.
- 2. The Government shall specify the collection and use of charges and fees for atomic energy activities and assurance of safety and security in these activities.

Article 81.- Responsibilities to specify and guide the declaration and issuance of licenses to

## perform radiation jobs

- 1. The Science and Technology Ministry shall specify and guide the following contents:
- a/ Procedures and dossiers for declaration of radioactive material and nuclear equipment;
- b/ List of radiation jobs involving the use of radioactive sources and radiation equipment for which licenses are not required;
- c/ Dossiers of application for licenses to operate research nuclear reactors;
- d/ Dossiers of application for licenses to transport radioactive material in transit via the Vietnamese territory; dossiers of application for licenses to operate nuclear-powered seagoing ships and other vehicles in the Vietnamese territory;
- e/ Time limits for examination of dossiers of application for licenses to construct or operate research nuclear reactors;
- f/ Contents and set forms of licenses;
- g/ Personnel and technical conditions for being licensed.
- 2.The Industry and Trade Ministry shall assume the prime responsibility for. and coordinate with the Science and Technology Ministry in. specifying and guiding dossiers of application for licenses, time limits for examination of dossiers of application for licenses to operate nuclear power plants: contents and set forms of licenses; financial, personnel and technical conditions for being licensed.

## **Chapter X**

## RESPONSE TO RADIATION OR NUCLEAR INCIDENTS AND COMPENSATION FOR DAMAGE CAUSED BY THESE INCIDENTS

#### Section 1. RESPONSE TO RADIATION INCIDENTS, NUCLEAR INCIDENTS

#### Article 82.- Radiation incidents, nuclear incidents

- 1. A radiation incident means the state of radiation unsafety or insecurity of radioactive sources. A nuclear incident means the state of nuclear unsafety or insecurity of nuclear material or equipment.
- 2. Radiation incidents and nuclear incidents (below collectively referred to as incidents) are divided into five groups of potential circumstances for the purpose of working out appropriate response plans:
- a/ Group 1: Circumstances of unserious incidents caused by abnormal operation of equipment or by human beings, in which no radioactive leakage or harm to human beings is detected:
- b/ Group 2: Circumstances of less serious incidents caused by damaged equipment or human beings, resulting in a radioactive leakage which, however, does not widely spread and causes no harm to human beings:
- c/ Group 3: Circumstances of serious incidents caused by heavily damaged equipment or human beings, resulting in a radioactive leakage which widely spreads and causes harms to human beings within the facility performing radiation jobs;
- d/ Group 4: Circumstances of very serious incidents caused by heavily damaged equipment or human beings, resulting in a radioactive leakage which widely spreads and causes harms to human beings and the environment outside the facility performing radiation jobs but within a province or centrally run city.
- e/ Group 5: Circumstance of particularly serious incidents caused by heavily damaged equipment or human beings, resulting in a radioactive leakage which strongly spreads and causes harms to human beings and the environment in wide areas outside the facility performing radiation jobs, affecting two or more provinces and centrally run cities or beyond

the national boundary. This group covers also incidents occurring in foreign countries but affecting one or more than one locality of Vietnam.

- 3. Levels of nuclear incidents to be announced on the mass media upon their occurrence are determined as follows:
- a/ An incident of level 1 means an anomaly beyond the prescribed operation regime but still within permitted limits;
- b/ An incident of level 2 means an incident occurring when a protection device is damaged or a radiation worker is irradiated within permitted limits;
- c/ An incident of level 3 means a serious incident resulting in a leakage of radioactive substances and irradiation of local inhabitants within permitted limits:
- d/ An incident of level 4 means an accident in which a radiation worker is irradiated at a fatal level, no harm is caused outside the nuclear facility, and local inhabitants is irradiated within permitted limits;
- e/An incident of level 5 means an accident in which harms are caused outside the nuclear facility but the amount of radioactive substances leaked out of the nuclear facility is negligible, and it is necessary to take some of the response measures;
- f/ An incident of level 6 means a serious accident in which a considerable amount of radioactive substances is leaked out of the nuclear facility and it is necessary to take all of the response measures;
- g/An incident of level 7 means a particularly serious accident in which a large amount of radioactive substances is leaked out of the nuclear facility, causing harms to human beings and the environment.
- 4. The Government shall specify the determination of incident levels and the announcement on the mass media upon the occurrence of incidents.

## Article 83.- Incident response plans

- 1. Incident response plans include plans on response to Facility-level incidents, plans on response to provincial-level incidents and plans on response to national-level incidents.
- 2. Plans on response to facility-level incidents are applied when incidents of group 1. 2 or 3 specified in Clause 2. Article 82 of this Law occur.
- A plan on response to a facility-level incident covers the anticipation of potential incidental circumstances; plan on mobilization of manpower and vehicles for application of initial response measures, organization of the giving of first aid to victims, prevention of the incident from widely spreading and mitigation of its consequences, segregation of the dangerous area and control of safety and security; and organization of annual incident response maneuvers.
- 3. Plans on response to provincial-level incidents are applied when incidents of group 4 specified in Clause 2. Article 82 of this Law occur or incidents of group 1,2 or 3 specified in Clause 2, Article 82 of this Law occur beyond the responding capability of facilities.
- A plan on response to a provincial-level incident covers the anticipation of potential incidental circumstances; plan on mobilization of manpower and vehicles for application of initial response measures, organization of the giving of first aid to victims, prevention of the incident from widely spreading and mitigation of its consequences, segregation of the dangerous area and control of safety and security; and organization of annual incident response maneuvers.
- 4. Plans on response to national-level incidents are applied when incidents of group 5 specified in Clause 2. Article 82 of this Law occur or incidents of group 4 specified in Clause 2, Article 82 of this Law occur beyond the responding capability of provinces.
- A plan on response to a national-level incident covers the organization of an apparatus,

anticipation of potential incidental circumstances, plan on response to an incident, and organization of biennial incident response maneuvers.

5. Organizations and individuals performing radiation jobs shall elaborate plans on response to facility-level incidents. Licensing agencies are competent to approve plans on response to facility-level incidents.

Provincial-level People's Committees shall elaborate plans on response to provincial-level incidents. The Science and Technology Ministry shall guide the elaboration of plans on response to provincial-level incidents and approve these plans.

The Science and Technology Ministry shall assume the prime responsibility for, and coordinate with the Industry and Trade Ministry, the Health Ministry, the Defense Ministry, the Public Security Ministry and provincial-level People's Committees of localities where radiation or nuclear facilities are located and concerned agencies, organizations and individuals in, elaborating plans on response to national-level incidents and submitting them to the. Prime Minister for approval.

**Article 84.-** Responsibilities of concerned organizations and individuals upon the occurrence of incidents

- 1. Organizations and individuals performing radiation jobs shall:
- a/ Identify places where incidents occur, and preliminarily identify their causes and characteristics as well as their possible progression corresponding to groups of incident circumstances specified in .Article 82 of this Law before applying response measures:
- b/ Mobilize manpower and vehicles of concerned facilities to remedy and prevent incidents from widely spreading, mitigate their consequences, organize the giving of fust aid to victims, segregate dangerous areas, and control security;
- c/ Promptly notify their immediate superior agencies or organizations. People's Committees or police offices of localities where incidents occur or the radiation and nuclear safety agency of places where incidents occur; preliminarily verify causes of incidents and their effects on human beings and the environment:
- d/ Supply information and documents and create all necessary conditions for remedying and investigating causes of incidents.
- 2. Ministries and branches directly managing organizations and individuals performing radiation jobs and their immediate superior organizations shall:
- a/ Direct these organizations and individuals performing radiation jobs in implementing incident response plans;
- b/ Immediately send their authorized personnel to places where incidents occur to supervise and urge the response to incidents;
- c/ Mobilize their own manpower and vehicles to support the response to incidents in case incidents go beyond the responding capability of

#### facilities:

- d/ Notify, within five days after the occurrence of incidents of group 1,2 or 3 specified in Clause 2, Article 82 of this Law, People's Committees and police offices of localities where incidents occur and the radiation and nuclear safety agency of matters related to incidents and applied measures to remedy incidents.
- e/ Promptly report to the Science and Technology Ministry and the National Search and Rescue Committee on incidents of groups 4 and 5 specified in Clause 2. Article 82 of this Law. and mobilize their own manpower and vehicles to take pan in responding to incidents at the request of the National Search and Rescue Committee.
- f/ Coordinate with the Science and Technology Ministry and concerned agencies in investigating and identifying causes and levels of incidents as specified in Clause 3, Article 82

of this Law.

- g/ Coordinate with the Health Ministry in mobilizing manpower and vehicles to take part in rescue and salvage operations;
- h/ Supply information and documents, and create all necessary conditions for conducting rescue and salvage operations, remedying and investigating causes of incidents.
- 3. Provincial-level People's Committees shall: a/ Organize the implementation of. and direct concerned agencies in their localities in implementing, provincial-level incident response plans upon the occurrence of incidents of group 4 specified in Clause 2. Article 82 of this Law; promptly report to the Chairman of the National Search and Rescue Committee and ask for support in case incidents go beyond the responding capability of their localities:
- b/ Direct and inspect the implementation of establishment-level response plans upon the occurrence of incidents of groups 1, 2 and 3 specified in Clause 2. Article 82 of this Law: and provide timely support in case incidents go beyond the responding capability of facilities;
- c/ Mobilize local manpower and vehicles to take part in responding to incidents at the request of the Chairman of the National Search and Rescue Committee for implementation of provincial-level or national-level incident response plans;
- d/ Promptly report to the Science and Technology Ministry on incidents occurring in their localities;
- e/ Notify incidents occurring in their locality on the local mass media.
- 4. The Science and Technology Ministry shall:
- a/ Direct the radiation and nuclear safety agency in taking support measures, mobilizing manpower and vehicles to remedy incidents; prevent incidents from widely spreading, mitigate their consequences and segregate dangerous areas:
- b/ Coordinate with provincial-level People's Committees and the National Search and Rescue Committee in implementing provincial-level and national-level incident response plans;
- c/ Promptly report to the National Search and Rescue Committee on incidents of group 5 specified in Clause 2. Article 82 of this Law;
- d/ Identify causes and levels of incidents as specified in Clause 3, Article 82 of this Law; and notify them on the mass media;
- e/ Notify incidents to concerned countries and international organizations and ask for international supports under treaties and international agreements on notification of incidents and international support to which the Socialist Republic of Vietnam is a contracting party in case these incidents cause no effects beyond the national boundary.
- 5. The National Search and Rescue Committee shall:
- a/ Organize the implementation of. and direct concerned agencies in implementing, national-level incident response plans upon the occurrence of incidents of group 5 specified in Clause 2, Article 82 of this Law;
- b/ Provide timely supports for the response to incidents of group 4 specified in Clause 2. Article 82 of this Law if these incidents go beyond the responding capability of localities.
- 6. The Defense Ministry shall:
- a/ Mobilize manpower and vehicles to take part in the implementation of national-level incident response plans upon the occurrence of incidents of group 5 specified in Clause 2, Article 82 of this Law;
- b/ Mobilize manpower and vehicles to support the response to incidents of group 4 specified in Clause 2, Article 82 of this Law if these incidents go beyond the responding capability of localities.

- 7. The Public Security Ministry shall direct and mobilize manpower and vehicles to take part in the implementation of national-level incident response plans; assume the prime responsibility for, and coordinate with the Science and Technology Ministry and concerned agencies in, investigating causes of incidents.
- 8. The Foreign Affairs Ministry shall assume the prime responsibility for, and coordinate with the Science and Technology Ministry in. notifying incidents to concerned countries and international organizations, and asking for international support under treaties and international agreements on notification of incidents and international support to which the Socialist Republic of Vietnam is a contracting party in case these incidents cause effects beyond the national boundary.
- 9. The Health Ministry shall direct and mobilize manpower and vehicles to take part in rescue and salvage operations.
- 10. Concerned organizations and individuals shall supply information and documents, and create all necessary conditions for remedying and investigating causes of incidents.

Article 85.- Principles on supply of information on radiation incidents, nuclear incidents

- 1. Information on a radiation incident or nuclear incident which is likely to impact areas surrounding the place where it occurs must be promptly and truthfully supplied to local inhabitants.
- 2. The mass media agencies reporting on radiation incidents and nuclear incidents shall ensure the truthfulness and objectiveness of reported information and be held responsible under the press law.

Article 86.- Response to radiation incidents, nuclear incidents in emergency circumstances

Upon the occurrence of a particularly serious incidental circumstance which might cause a big disaster, the declaration of a state of emergency and direction of response to the incident comply with the law on the state of emergency.

## **Section 2. COMPENSATIONS FOR DAMAGE**

Article 87.- Responsibility to pay compensations for radiation damage, nuclear damage

1. Radiation damage means a loss caused by a radiation incident to human beings, property and the environment, including expenses for mitigating consequences.

The responsibility to pay compensations for radiation damage is determined under the civil law.

2. Nuclear damage means a loss caused by a nuclear incident to human beings, property and the environment, including expenses for mitigating consequences.

Organizations and individuals that are owners of nuclear material or equipment or those authorized by owners to store or use these materials or equipment shall pay compensations for damage caused by nuclear incidents even though it is not their fault, except for incidents occurring due to wars, terrorism or natural disasters beyond the designed safety limits under national technical regulations.

Article 88.- Levels of compensations for radiation damage, nuclear damage

- 1. For radiation damage, compensation levels are determined under the civil law.
- 2. For nuclear damage, compensation levels are agreed upon by involved parties. If these parties cannot reach agreement, compensation levels comply with the following provisions:
- a/ Damage to human beings shall be determined under the civil law;
- b/ Damage to the environment shall be determined under the environmental protection law;
- c/ Total compensation per nuclear incident occurring in a nuclear power plant must not

exceed SDK 150 million. For incidents occurring in other nuclear facilities and facilities in the transportation of nuclear material, the total compensation must not exceed SDR 10 million.

SDR specified in this Clause means a currency unit defined by the International Monetary Fund, standing for the special drawing right, and may be converted into Vietnam dong at the exchange rate applicable at the time of compensation payment.

- **Article 89.-** Statute of limitations for instituting lawsuits to claim compensations for radiation damage, nuclear damage
- 1. The statute of limitations for instituting lawsuits to claim compensations for radiation damage is determined under the civil law.
- 2. The statute of limitations for instituting lawsuits to claim compensations for nuclear damage is specified as follows:
- a/ For property and environmental damage, this statute of limitations is ten years after the occurrence of a nuclear incident.
- b/ For human damage, this statute of limitations is thirty years after the occurrence of a nuclear incident.
- **Article 90.-** Occupational insurance, civil liability insurance and insurance for liability to pay compensations for environmental damage
- 1. Organizations and individuals performing radiation jobs shall purchase occupational insurance and civil liability insurance. For radiation jobs which might cause severe damage to the environment, insurance for the liability to pay compensations for environmental damage is required.
- 2. The Government shall specify the purchase insurance prescribed in Clause 1 of this Article.

## **Article 91.-** Support fund for remedying nuclear damage

- 1. The support fund for remedying nuclear damage is used in the following cases:
- a/ Organizations and individuals responsible to pay compensations for damage no longer exist;
- b/ Damage extent exceeds the maximum compensation level per nuclear incident-specified at Point c, Clause 2, Article 88 of this Law.
- 2. The support fund for remedying nuclear damage is raised from the following sources:
- a/ Contributions of nuclear facilities;
- b/ Financial supports of domestic organizations and individuals;
- c/ Financial supports of foreign organizations and individuals and international organizations;
- d/ Other sources as specified by law.
- 3. The Prime Minister shall specify this fund.

#### Chapter X I

#### IMPLEMENTATION PROVISIONS

## **Article 92.-** Implementation effect

This Law takes effect on January 1, 2009.

To annul the June 25. 1996 Ordinance on radiation safety and control.

#### **Article 93.-** Implementation guidance

The Government shall detail Articles 65. 80. 82 and 90 and other necessary contents of this

Law to meet management requirements.

This Law was passed on June 3, 2008, by the  ${\rm XII}^{\rm t\,h}$  National Assembly of the Socialist Republic of Vietnam at its third session.

## CHAIRMAN OF THE NATIONAL ASSEMBLY

**Nguyen Phu Trong** 

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