Pursuant to paragraph thirteen of Article 121 of the Ionising Radiation Protection and Nuclear Safety Act (Official Gazette of the Republic of Slovenia *[Uradni list RS*], Nos 76/17 and 26/19), the Minister of the Environment and Spatial Planning hereby issues the

RULES

on radioactive waste and spent fuel management

I. GENERAL PROVISIONS

Article 1

(Subject)

(1) These Rules regulate:

1. the classification of radioactive waste according to the level and type of radioactivity,
2. written procedures, radioactive waste and spent fuel management programmes and radioactive waste management plans,
3. the sorting, processing, packaging, labelling, storage, decay-storage, handover, acceptance and movement of radioactive waste and spent fuel,
4. the discharge of liquid and gaseous radioactive waste,
5. the disposal of radioactive waste,
6. the acceptance criteria for storage and disposal,
7. the special requirements for managing waste from the extraction and processing of nuclear minerals and very low level radioactive waste, and
8. the register of holders, the central register of radioactive waste and spent fuel, and the reporting of information to the central register.

(2) These Rules transpose the following EU directives into the legal system of the Republic of Slovenia:

* Council Directive 2013/59/Euratom of 5 December 2013 laying down the basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (OJ L 13, 17.1.2014, p. 1), last amended by corrigendum (OJ L 152, 11.6.2019, p. 128), and
* Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste (OJ L 199, 2.8.2011, p. 48).

Article 2

(Application)

The provisions of these Rules shall apply to:

1. radioactive materials in gaseous, liquid or solid form, objects or equipment containing radioactive substances or contaminated with radioactivity exceeding clearance levels, if they are generated as waste from radiation practices or from intervention measures and are not expected to be further used in accordance with the regulations governing ionising radiation protection (hereinafter: radioactive waste), and
2. spent fuel.

Article 3

(Definitions)

For the purposes of these Rules, the following definitions shall apply:

1. Packaging shall mean articles intended to enclose or contain radioactive waste or spent fuel for the purposes of storage, protection, handling or shipment or movement from their place of origin to processing or during storage or disposal. Radioactive waste or spent fuel shall be put into packaging either directly or pre-packaged.
2. Holder of radioactive waste or spent fuel shall mean their producer or the person holding radioactive waste or spent fuel (hereinafter: holder); a holder can also be a provider of the mandatory national service of general economic interest of managing radioactive waste (hereinafter: public service).
3. Criticality shall mean the state of a material, when a stable self-sustaining nuclear chain reaction is taking place in the material.
4. Acceptance criteria for storage or disposal shall mean qualitative or quantitative criteria regarding the properties of radioactive waste or spent fuel that radioactive waste and spent fuel must meet to be stored or disposed of safely.
5. Repository shall mean a facility whose main purpose is the disposal of radioactive waste.
6. Decay-storage shall mean temporary storage or containment of radioactive waste or spent fuel for a definite period of time in order to reduce the radionuclide activity level or their thermal power.
7. Clearance shall mean a procedure under the regulation governing radiation practices, based on which radioactive waste is no longer managed pursuant to the regulations governing ionising radiation protection.
8. Package shall mean packaging complete with internal barriers or absorption material and radioactive waste or spent fuel. A package shall also mean unpackaged bulk radioactive waste or unpackaged spent fuel.
9. Written procedures shall mean written instructions for handling radioactive waste or spent fuel.
10. Processing shall mean any of the following procedures for treating radioactive waste or spent fuel prior to storage, transport or disposal:

pretreatment to prepare radioactive waste or spent fuel for treatment;

treatment to alter radioactive waste or spent fuel properties for technical, economic or safety reasons; and

conditioning to prepare packaged or unpackaged radioactive waste or spent fuel so that it meets the requirements for transport, storage or disposal.

1. Transient radioactive waste shall mean radioactive waste in which, in less than five years of decay-storage or storage, the level of specific activity of radionuclides contained falls to a level at which clearance may be permitted in accordance with the regulation governing radiation practices.
2. Movement shall mean the internal transport of radioactive waste or spent fuel within the facility where radiation practices are carried out.
3. Short-term storage facility shall mean a facility in which the producer or the holder may temporarily store radioactive waste until their handover to a storage facility or public service provider.
4. Storage facility shall mean a nuclear facility in which radioactive waste or spent fuel is stored.
5. Specific surface contamination shall mean the activity in Bq per unit of surface area.
6. Residual heat shall mean the heat generated in radioactive waste or spent fuel due to radioactive decay.

II. RADIOACTIVE WASTE CLASSIFICATION

Article 4

(Radioactive waste classification)

(1) Depending on its physical state, radioactive waste is classified as solid, liquid or gaseous.

(2) Solid radioactive waste is classified into the following categories, according to the level and type of radioactivity:

1. transient radioactive waste;
2. very low level waste (hereinafter: VLLW), which does not require a high level of containment and isolation and for which clearance may be permitted by the authority responsible for nuclear safety (hereinafter: the Administration) or the authority responsible for radiation protection;
3. low and intermediate level waste (hereinafter: LILW), whose thermal power does not need to be taken into account in its management; LILW is further classified into two groups:
   1. short lived LILW, in which the specific activity of the contained alpha emitters with a half-life of more than 30 years does not exceed 4000 Bq/g in any individual package and the overall average of 400 Bq/g in the entire amount of LILW;
   2. long lived LILW, in which the specific activity of alpha emitters exceeds the limits applying to short-lived LILW;
4. high level waste (hereinafter: HLW), which contains radionuclides, the decay of which generates such heat that it must be taken into account in its management;
5. radioactive waste containing naturally occurring radionuclides, which are produced in the extraction and processing of nuclear minerals or in other industrial processes and are not considered sealed sources of radiation under the Act governing ionising radiation protection and nuclear safety.

III. GENERAL REQUIREMENTS FOR RADIOACTIVE WASTE AND SPENT FUEL MANAGEMENT

Article 5

(Written procedures)

(1) Radioactive waste and spent fuel shall be handled in accordance with the written procedures established by their holder.

(2) The scope and content of the written procedures are laid down in Annex 1, which is an integral part of these Rules.

(3) If a holder is the operator of a radiation or nuclear facility, the written procedures referred to in paragraph one of this Article shall be drawn up in accordance with the holder’s management system and shall contain the components laid down in Annex 1 to these Rules.

Article 6

(Radioactive waste or spent fuel management programme)

(1) A holder that is the operator of a radiation or nuclear facility shall ensure that the radioactive waste or spent fuel is managed in compliance with the radioactive waste or spent fuel management programme (hereinafter: programme), which must be drawn up in accordance with the National Programme for Radioactive Waste and Spent Fuel Management.

(2) The programme shall be a stand-alone document whose content shall be in accordance with the content of the safety report; it shall be drawn up in accordance with Annex 2, which is an integral part of these Rules, and with the holder’s management system and shall contain at least the information on:

1. the organisation of radioactive waste or spent fuel management activities, including the specification of responsibilities and the listing of qualifications of responsible persons in accordance with the regulation governing the conditions to be met by workers carrying out work relevant to the safety in nuclear and radiation facilities;
2. the written procedures referred to in the preceding Article, standards and other documents in accordance with which radioactive waste or spent fuel is handled;
3. the manner of radioactive waste or spent fuel generation and its categories, types and quantities and the quantities expected to be generated by years;
4. the methods of radioactive waste or spent fuel management at the time of the development of the programme and the envisaged methods of radioactive waste or spent fuel management;
5. technical, organisational and other measures taken to reduce the generation of radioactive waste or spent fuel and prevent harmful effects on human health and radioactive contamination of the living environment at the time of the development of the programme, as well as the planned future measures for this purpose, including the optimisation of radioactive waste or spent fuel management;
6. the planned procedures related to the handover of radioactive waste or spent fuel to a public service provider, its disposal, its export or transfer to other European Union (hereinafter: EU) Member States, its clearance and other procedures related to the keeping of the record of radioactive waste or spent fuel;
7. the capacity and capacity utilisation levels for all radioactive waste or spent fuel management operations at the time of the development of the programme and the expected capacity and capacity utilisation levels for these operations in the future;
8. the use, selection and planning of radioactive waste or spent fuel management operations; the management shall be designed so as to take into account the interdependencies of all management stages from the generation to disposal of radioactive waste or spent fuel; and
9. the method of keeping records of stored or disposed of radioactive waste or spent fuel and the method of reporting to the central register of radioactive waste and spent fuel.

(3) The person liable referred to in paragraph one of this Article shall review the programme every two years. If the review shows that the programme needs to be updated, the amendment shall be made in accordance with the procedure for approving amendments in accordance with the Act governing ionising radiation protection and nuclear safety.

Article 7

(Radioactive waste management plan)

(1) A holder that is not an operator of a radiation or nuclear facility, shall draw up a radioactive waste management plan (hereinafter: plan).

(2) The plan referred to in the preceding paragraph shall include, *mutatis mutandis*, the content set out in paragraph two of the preceding Article.

(3) The plan referred to in paragraph one of this Article shall be approved by the Administration or the authority responsible for radiation protection in the procedure for issuing a permit to use a radiation source.

IV. SPECIAL REQUIREMENTS FOR RADIOACTIVE WASTE AND SPENT FUEL MANAGEMENT

Article 8

(Sorting)

(1) Holders shall sort radioactive waste according to its physical state, category and type.

(2) Holders shall determine the type of radioactive waste referred to in the preceding paragraph according to the typified definition of properties regarding compressibility, volatility, solubility, combustibility, corrosiveness, and other physical, chemical and biological characteristics, as far as they are relevant for further management of radioactive waste.

Article 9

(Processing)

(1) The processing of radioactive waste or spent fuel shall be carried out in accordance with the plan referred to in Article 7 of these Rules or the programme referred to in Article 6 of these Rules.

(2) In choosing the radioactive waste processing procedure, all relevant aspects shall be taken into account, including the following:

* nuclear and radiation safety,
* discharges of radioactive substances into the environment,
* minimum generation of secondary radioactive waste,
* possibility of clearance, and
* the established management system or quality assurance programme, except for operators of a nuclear or radiation facility.

(3) The management system referred to in the preceding paragraph shall also contain a quality assurance programme, which shall include:

* the properties of input waste to ensure operational safety and the quality of waste after processing,
* the determination of any process variables relevant to the quality of waste after processing and the determination of the deviation rate or deviation interval for these variables,
* the requirements for purchasing the equipment and providing services that could affect the quality of waste after processing, and
* the methods, manner and frequency of controls, sampling and testing.

(4) Processed radioactive waste and spent fuel shall be packaged in packages which shall meet the acceptance criteria for storage or disposal and the requirements regarding the properties of processed radioactive waste or spent fuel and further management procedures.

(5) Holders shall set the requirements for identifying, assessing and managing processed radioactive waste that does not meet the requirements regarding the properties of waste after processing.

(6) Holders shall adopt measures to manage secondary radioactive waste generated in the processing of radioactive waste or spent fuel.

(7) A holder that is the operator of a nuclear or radiation facility may use a mobile unit to process and package waste; however, the interaction between the mobile unit and the facility in which it operates must be specified in detail and safe.

(8) The use of a mobile unite referred to in the preceding paragraph shall be included in the facility's safety report, which shall indicate, *inter alia*, equipment installation periods, maintenance, decontamination and dismantling, as well as the period of operation.

(9) The producer of radioactive waste or spent fuel and their holder, if it is not the same person, shall agree on and document their responsibilities regarding the radioactive waste or spent fuel management.

Article 10

(Packaging)

(1) The packaging used for radioactive waste or spent fuel, together with the contained radioactive waste or spent fuel, shall ensure safety for the expected method and period of handling packages.

(2) Packaging shall also meet the requirements related to labelling, records, measurements and other safety, technical and organisational requirements in accordance with the regulation governing radiation and nuclear safety factors, in the part governing the content of safety reports for nuclear and radiation facilities.

(3) The use of a particular type of packaging shall be approved by the Administration in the procedure for issuing a permit to use a radiation source or the procedure for approving a safety analysis report or its amendment.

(4) Holders shall enclose with the packaging approval application the design and description of the packaging, the results of procedures and analyses and any other documents certifying that the packaging is fit for the intended purpose.

(5) Holders shall verify, through periodic inspections, whether the packaging is fit for the storage conditions. The frequency and method of packaging inspections shall be approved by the Administration in the procedure for approving the safety report.

(6) The packaging intended for transporting radioactive waste or spent fuel outside the facility shall meet the requirements of the regulations governing the transport of dangerous goods.

Article 11

(Labelling)

(1) Each package containing radioactive waste or spent fuel shall bear a symbol warning of radiation hazard specified in the regulation governing the use of radiation sources and radiation practices, and a label enabling the identification of the package and its contents.

(2) The label referred to in the preceding paragraph shall contain at least the following information:

1. the unique identification of the package in alphanumeric, machine-readable form,
2. the weight of the package,
3. the category of radioactive waste,
4. the type of radioactive waste,
5. the activity of radionuclides present in radioactive waste, and
6. the maximum measured dose rate on the package surface.

(3) The symbol and the label referred to in paragraph one of this Article shall be fit for the expected management methods as regards durability and shall be affixed in a visible place and clearly legible.

(4) The requirements for labelling spent fuel shall apply to the final packaging unit, as far as circumstances so allow.

(5) The manager of a radioactive waste or spent fuel storage facility or repository shall establish a system for tracking the location of each package containing radioactive waste or spent fuel.

(6) The symbols and labels referred to in paragraph one of this Article shall be removed from the packages cleared from control under the regulation governing radiation practices.

Article 12

(Short-term storage)

(1) Until radioactive waste is handed over to a storage facility or public service provider or until it is cleared from regulatory control, its holder shall store it in a short-term storage facility.

(2) The requirements to be met by the short-term storage facility and storage conditions are laid down in the regulation governing the use of radioactive sources and radiation practices.

Article 13

(Storage)

(1) Radioactive waste shall be stored in a radioactive waste storage facility and spent fuel in a spent fuel storage facility.

(2) Holders shall provide storage for all radioactive waste and all spent fuel that is not in the process of processing, movement or short-term storage.

(3) Only radioactive waste or spent fuel meeting the acceptance criteria for storage laid down in Article 20 of these Rules may be stored in a storage facility.

(4) Radioactive waste or spent fuel may only be stored in a packaging approved for storage.

(5) Holders shall store spent fuel and HLW in such a way as to prevent criticality and ensure the removal of residual heat.

(6) Holders bound by international obligations regarding nuclear safeguarding and keeping records of nuclear materials shall store radioactive waste and spent fuel in such a way as to enable the implementation of such obligations.

Article 14

(Decay-storage)

(1) Holders shall carry out the decay-storage of solid, liquid or gaseous radioactive waste in a short-term storage facility or a storage facility for radioactive waste.

(2) Holders shall carry out the decay-storage of spent fuel in a storage facility for spent fuel.

(3) Notwithstanding the provision of paragraph one of this Article, a holder may carry out the decay-storage of gaseous or liquid radioactive waste in accordance with the permit to use a radiation source or the permit to operate a radiation or nuclear facility.

(4) If the decay-storage of radioactive waste or spent fuel referred to in paragraphs one or two of this Article takes place in a storage facility, such storage facility shall be subject to the provisions of the preceding Article.

(5) If during decay-storage, the specific activity of radionuclides contained in radioactive waste falls below clearance levels in accordance with the regulation governing radiation practices, clearance from regulatory control may be approved for the waste.

Article 15

(Handover and acceptance)

(1) Holders may only hand over spent fuel or radioactive waste to a public service provider, unless it is classified as the radioactive waste referred to in Article 22 of these Rules.

(2) The provision of the preceding paragraph shall not apply to discharges, cleared radioactive waste and radioactive waste or spent fuel temporarily exported or transferred by the holder to another EU Member State for processing, storage or disposal.

(3) Notwithstanding the provision of paragraph one of this Article, the acceptance of radioactive waste and spent fuel from Krško Nuclear Power Plant by the Republic of Croatia shall be carried out in accordance with the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on the Regulation of the Status and Other Legal Relations Regarding the Investment in and Exploitation and Decommissioning of the Krško Nuclear Power Plant (Official Gazette of the Republic of Slovenia – International Treaties [*Uradni list RS – International treaties*], No. 23/03) and the Programme for the disposal of radioactive waste and spent fuel.

(4) Holders shall obtain from the public service provider information on acceptance criteria to be met by radioactive waste or spent fuel in order to be accepted for storage or disposal.

(5) The operator of a nuclear facility shall hand over radioactive waste or spent fuel in packages approved by the nuclear facility operator in the safety report for the storage of radioactive waste or spent fuel.

(6) Prior to the handover of radioactive waste or spent fuel referred to in the preceding paragraph, the package must be conditioned so as to meet the acceptance criteria for transport.

(7) The operator of the nuclear facility shall have an appropriate management system in place, including the requirements regarding the quality of radioactive waste, which the public service provider shall verify before accepting radioactive waste for disposal.

(8) Prior to the handover of radioactive waste or spent fuel, the holder shall give the public service provider a copy of the documents from its records on the radioactive waste or spent fuel, which are set out in Article 23 of these Rules and are relevant to further management of radioactive waste or spent fuel.

(9) The public service provider and the holder shall formulate procedures for managing the radioactive waste that does not meet the acceptance criteria for storage, disposal or further processing.

(10) The holder and the public service provider shall agree on the location of the handover of radioactive waste or spent fuel for storage or disposal; if no agreement is reached, the handover shall be carried out at the location of the holder.

(11) Upon the handover, the holder and the public service provider shall document the transfer of radioactive waste or spent fuel to another person.

(12) A holder that handed over radioactive waste to a public service provider shall inform the Administration or the authority responsible for radiation protection thereof within eight days.

Article 16

(Movement)

Holders may move radioactive waste or spent fuel within a nuclear or radiation facility in accordance with the safety report and the written procedures.

Article 17

(Discharge of liquid and gaseous radioactive waste)

(1) The radiation practice shall be carried out so that the discharges of liquid and gaseous radioactive waste into the environment do not exceed the approved limit values.

(2) The limit values referred to in the preceding paragraph shall be approved by the Administration, in the procedure for issuing a permit to carry out radiation practice or a permit to use a radiation source or the procedure for approving a safety report, for persons carrying out radiation practices, and by the authority responsible for radiation protection for persons carrying out radiation practices in human or veterinary medicine.

(3) In approving the limit values referred to in the preceding paragraph of this Article, the optimisation of radiation protection and good practices in operating similar facilities shall be taken into account, as appropriate.

(4) Holders of radioactive waste shall ensure that the discharges of liquid or gaseous radioactive waste into the environment are controlled and kept to a minimum.

(5) Liquid or gaseous radioactive waste shall be transformed into solid form, unless it is transient radioactive waste or radioactive waste permitted to be discharged into the environment.

Article 18

(Prohibition of dilution)

It shall be prohibited to deliberately dilute radioactive waste or divide it into several parts with lower activity levels so that it would meet the conditions for clearance, except for the approved discharge of liquid or gaseous radioactive waste referred to in the preceding Article.

Article 19

(Disposal)

(1) Solid radioactive waste that is not transient radioactive waste, VLLW or waste containing naturally occurring radionuclides may only be disposed of in a radioactive waste repository.

(2) In the procedure for issuing permits for the construction, trial operation and operation of a repository and for its closure, the Administration shall verify the compliance with the requirements for repositories and the disposal conditions.

(3) Only radioactive waste or spent fuel meeting the acceptance criteria for disposal laid down in Article 20 of these Rules may be disposed of in a repository.

(4) Packaged radioactive waste or spent fuel may only be disposed of in the packaging approved for disposal.

(5) The disposal of HLW shall be carried out so that, in addition to meeting other requirements, criticality is prevented and the removal of residual heat ensured.

Article 20

(Acceptance criteria for storage or disposal)

(1) Acceptance criteria for the storage or disposal of radioactive waste or spent fuel shall include the limits for:

1. the content of emitters and specific activity,
2. dose rates on the surface and at reference distances from the package surface,
3. specific surface contamination,
4. strength,
5. leachability,
6. corrosiveness,
7. chemical stability,
8. heat generation,
9. degradation effects of radiation, i.e. changes in the properties of materials resulting from exposure to ionising radiation,
10. change in volume,
11. flammability,
12. gas formation and gas content,
13. content of toxic substances,
14. content of organic substances with potential effects on microbiological degradation,
15. free liquid content,
16. presence of chelating and other complexes,
17. explosiveness,
18. combustibility,
19. corrosion resistance,
20. permeability and porosity,
21. void fraction,
22. criticality,
23. suitable method of the labelling of radioactive waste or spent fuel packages,
24. adequacy of the packaging and the method of packaging radioactive waste or spent fuel.

(2) Notwithstanding the provisions of the preceding paragraph, the acceptance criteria referred to in the preceding paragraph shall also include any other restrictions specified in the safety report for the storage facility or repository concerned, or may exclude restrictions regarding certain properties listed in the preceding paragraph if so provided in the safety report for the storage facility or repository concerned.

(3) The acceptance criteria for disposal shall also include criteria that ensure that radioactive waste accepted by the repository will be chemically and physically stable for the period for which the safety report was made and in accordance with the repository components.

(4) The acceptance criteria referred to in paragraph one of this Article shall be specified for individual packages, for storage or disposal units and for the storage facility or repository as a whole.

(5) The acceptance criteria referred to in paragraph one of this Article shall be laid down by the operator of the storage facility or repository. They shall be approved by the Administration in its opinion on the construction, in the approval of trial operation and in the operating permit for the storage facility or repository.

Article 21

(Waste from extraction and processing of nuclear minerals)

(1) Mining and hydrometallurgical tailings generated in the extraction of nuclear minerals that contain radioactive materials above the clearance level in accordance with the regulation governing radiation practices shall be classified into the category of radioactive waste containing naturally occurring radionuclides.

(2) Mining and hydrometallurgical tailings referred to in the preceding paragraph shall be disposed of in repositories for mining and hydrometallurgical tailings.

(3) In its opinion on the construction, in the approval of trial operation and in the permit for the operation or closure of a repository for mining and hydrometallurgical tailings, the Administration shall assess the compliance with the requirements applicable to the repository and the disposal conditions.

(4) Other radioactive waste containing naturally occurring radionuclides, except sealed sources, may be disposed of in the repository for mining and hydrometallurgical tailings.

(5) During the operation of the facility for the extraction and processing of nuclear minerals, radioactive waste containing naturally occurring radionuclides shall be managed in accordance with the approved safety report.

Article 22

(Management of very low level waste)

(1) VLLW may be disposed of as non-radioactive waste, recycled or recovered, provided that it meets the general clearance criteria laid down in the Act governing ionising radiation protection and nuclear safety and the criteria for exemption from the regulation governing radiation practices pursuant to which the Administration or authority responsible for radiation protection can permit clearance from regulative control for radioactive waste.

(2) The fulfilment of the condition referred to in the preceding paragraph shall be demonstrated, for the proposed mode of management, in the procedure for approving clearance in accordance with the regulation governing radiation practices.

V. RECORDING AND REPORTING

Article 23

(Records kept by holders)

(1) Holders that store, process or dispose of radioactive waste or spent fuel, and holders that discharge radioactive waste, shall keep up-to-date records of the following information on radioactive waste or spent fuel:

* short-term storage,
* processing in a technological process,
* storage or discharge,
* clearance, recycling or recovery,
* handover to a public service provider, and
* temporary or permanent export or transfer.

(2) The records referred to in the preceding paragraph shall contain, with regard to each package, the information on the management history and information relevant for meeting the acceptance criteria for storage or disposal, for the further handling of radioactive waste or spent fuel, or for the safety and quality of waste after processing.

(3) The records of discharges of radioactive waste shall contain, for each discharge, at least the information on the origin and quantity of radioactive material discharged and information showing that the approved discharge values have not been exceeded.

(4) Holders shall keep the records referred to in paragraph one of this Article in accordance with the programme referred to in Article 6 of these Rules or the plan referred to in Article 7 of these Rules. Holders shall keep the documents and information in the records:

* with regard to short-term storage: for two years following the cessation of short-term storage;
* with regard to processing in a technological process: for two years following the completion of the processing;
* with regard to storage: for ten years following the cessation of storage;
* with regard to discharge: permanently;
* with regard to clearance, recycling or recovery: for two years following the clearance, recycling or recovery;
* with regard to the handover of radioactive waste or spent fuel to a public service provider: for two years following the handover, and
* with regard to temporary or permanent export or transfer: for two years after the completion of the export or transfer.

(5) In the event of its bankruptcy or liquidation, the holder shall hand over the documents referred to in the preceding paragraph and the records referred to in paragraph one of this Article to the legal entity taking over the responsibility for further management, and shall notify the Administration thereof.

(6) The requirements referred to in this Article shall apply, *mutatis mutandis*, to the records on radioactive waste or spent fuel and their producer that must be kept by public service providers; these information and documents shall be kept for two years following the acceptance.

(7) Public service providers shall keep the information on disposed of radioactive waste until the long-term supervision of the repository is concluded.

Article 24

(Central register of radioactive waste and spent fuel)

(1) The central register of radioactive waste and spent fuel kept by the Administration (hereinafter: central register) shall contain information on any radioactive waste or spent fuel that:

* is located at the holders,
* has been discharged into the environment,
* is abroad due to processing,
* has been handed over to a public service provider,
* has been cleared from regulatory control, or
* has been permanently exported or transferred abroad.

(2) The central register shall be kept by calendar years of the generation of radioactive waste or spent fuel.

(3) The format of information in the central register is laid down in Annex 3, which is an integral part of these Rules:

* for solid and liquid radioactive waste: in Tables Ia, Ic and Id,
* for spent fuel: in Tables Ib and Id.

(4) Notwithstanding the provisions of paragraph one of this Article, certain content of the central register may be kept in separate records or databases.

Article 25

(Reporting information to the central register)

(1) Holders of radioactive waste or spent fuel shall report information to the central register in the format referred to in paragraph four of the preceding Article.

(2) By the end of February of the current year, holders shall submit to the central register a report, in electronic form, on the following:

* the status at the end of the previous calendar year,
* changes in the radioactive waste or spent fuel inventory in the previous calendar year.

(3) Holders shall enclose with the report referred to in the preceding paragraph information explaining the changes in the radioactive waste or spent fuel inventory.

(4) At the request of the Administration, holders shall provide any other information and documents from the records referred to in Article 23 of these Rules.

VI. TRANSITIONAL AND FINAL PROVISIONS

Article 26

(Harmonisation)

Public service providers shall amend the acceptance criteria for storage or disposal referred to in Article 20 of these Rules within three years of the entry into force of these Rules.

Article 27

(End of validity)

On the day these Rules enter into force, the Rules on radioactive waste and spent fuel management (Official Gazette of the Republic of Slovenia [*Uradni list RS*], Nos 49/06 and 76/17 – ZVISJV-1) shall cease to be in force.

Article 28

(Entry into force)

These Rules shall enter into force on the fifteenth day following their publication in the Official Gazette of the Republic of Slovenia.

No. 007-116/2021

Ljubljana, 20 July 2021

EVA 2021-2550-0009

**Andrej Vizjak**  
Minister of the Environment and Spatial Planning

[Annex 1: Content of the written procedures for radioactive waste and spent fuel management](http://pisrs.si/Pis.web/npb/2021-01-2652-p1.pdf)

[Annex 2: Content of the radioactive waste or spent fuel management programme](http://pisrs.si/Pis.web/npb/2021-01-2652-p2.pdf)

[Annex 3: Central register](http://pisrs.si/Pis.web/npb/2021-01-2652-p3.pdf)

**Annex 1: Content of the written procedures for radioactive waste and spent fuel management**

|  |  |  |
| --- | --- | --- |
|  | **Chapter** | **Content of the chapter** |
| **(1)** | **Purpose** | An explanation of the purpose of the written procedure. |
| **(2)** | **Scope** | The specification of the scope of application of the document – with regard to the systems, processing procedures, location, etc. – and its delimitation with regard to other procedures. |
| **(3)** | **Responsibilities** | The list of responsible persons and their responsibilities regarding the performance of activities in accordance with the written procedure. |
| **(4)** | **Definitions** | The definitions of key terms, codes and abbreviations. |
| **(5)** | **References** | The list of regulations, procedures, standards and other documents to which the written procedure refers. |
| **(6)** | **Preconditions** | The list of procedures and activities that must be carried out and conditions that must be provided (e.g. equipment) before the procedure is carried out and the list of persons responsible for the provision of these conditions. |
| **(7)** | **Safety measures** | The list of safety measures required to protect the health and property of workers and the population and to prevent or reduce the possibility of emergency situations. |
| **(8)** | **Limit values** | The specification of limit values for the parameters (weight, pressure, temperature, activity, etc.) relevant for carrying out the procedure and of measures to be taken in the event of exceeded limit values. |
| **(9)** | **Description of the procedure** | A detailed description of the procedure by stages. |
| **(10)** | **Verification** | The list of the procedure operations that must be verified and the stages of the procedure in which the verification is carried out. |
| **(11)** | **Adequacy criteria** | The specification of criteria for assessing the performance of the procedure and the verification methods. |
| **(12)** | **Record** | The specification of the form, content, time and place of keeping and other elements of the record of the performed procedures. |

Documents produced pursuant to Annex 1 must have a title page containing the following:

* the title of the document,
* version number,
* the name of the organisation that produced the document, and
* the full names and signatures of the persons who produced, reviewed or approved the document, and the dates of their signing.

Each page of the document shall indicate the page number, the total number of pages of the document, the number or title of the document and the version number (revision).

**Annex 2: Content of the radioactive waste or spent fuel management programme**

|  |  |
| --- | --- |
| (1) | Introduction  Purpose  Scope  Short description of the holder's activities |
| (2) | Organisation and method of carrying out the activities  Organisation of management, recording and reporting  Organisational chart  List of responsible services and persons  Specification of qualifications required for responsible persons and other workers |
| (3) | Information on the documents pursuant to which the activities are carried out  Decisions of administrative authorities  Regulations  Standards  Written procedures  Other documents |
| (4) | Packaging information |
| (5) | Information on radioactive waste or spent fuel  Types  Manner and place of generation  Expected quantities generated |
| (6) | Management procedures and methods and equipment  Current  Planned, including measurable performance indicators |
| (7) | Keeping records on radioactive waste or spent fuel |
| (8) | Measures to reduce the generation of radioactive waste or spent fuel and the radiation and other impacts of radioactive waste or spent fuel, including the optimisation of radioactive waste or spent fuel management  Current  Planned, including measurable performance indicators |
| (9) | Procedures for radioactive waste or spent fuel disposal  Handover to a public service provider  Discharge  Clearance  Recycling and recovery  Export  Transfer to EU Member States  Disposal of radioactive waste  Other |
| (10) | Capacity of technological management procedures  Current capacity (processing, storage, etc.)  Expected capacity  Capacity utilisation and availability levels |
| (11) | Consideration of interdependence of all management stages  Compliance of the current management procedures with the requirements of the public service provider |
| (12) | Compliance of management procedures with the national programme for radioactive waste and spent fuel management |

Documents produced pursuant to Annex 2 must have a title page containing the following:

* the title of the document,
* version number,
* the name of the organisation that produced the document, and
* the full names and signatures of the persons who produced, reviewed or approved the document, and the dates of their signing.

Each page of the document shall indicate the page number, the total number of pages of the document, the number or title of the document and the version number (revision).

Annex 3: Central register

Table Ia: Form of the record on solid or liquid radioactive waste in the central register

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seq. No.** | **Information title** | **Explanation** | **Format** | **Unit** |
| 1 | Ref. No. | Reference number of the package | Number |  |
| 2 | Holder | Holder of radioactive waste | Text |  |
| 3 | Facility | Name of the facility | Text |  |
| 4 | Location | Location of the package in the facility | Text |  |
| 5 | Category | Category of radioactive waste | Text |  |
| 6 | Type | Typified description of properties | Text |  |
| 7 | Date | Date of radioactive waste generation, which is used to calculate the activity | Date |  |
| 8 | Producer | Producer of radioactive waste | Text |  |
| 9 | Packaging | Type-approved packaging | Text |  |
| 10 | Weight | Weight of the package | Number | kg |
| 11 | Volume | Volume of the package | Number | m3 |
| 12 | Contamination | Surface contamination of the package alpha/beta/gamma | Number | Bq/dm2 |
| 13 | Dose rate | Maximum measured dose rate on the package surface | Number | mSv/h |
| 14 | Processing | Processing | Text |  |
| 15 | F processing | Further processing | Text |  |
| 16 | End | Year when the activity is expected to fall below the clearance level | Number | Year |
| 17 | Radionuclides | Link to Table Ic – Inventory of radionuclides | Number |  |

Table Ib: Form of the record on spent fuel in the central register

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seq. No.** | **Information title** | **Explanation** | **Format** | **Unit** |
| 1 | Ref. No. | Reference number of the package | Number |  |
| 2 | Holder | Holder of spent fuel | Text |  |
| 3 | Facility | Name of the facility | Text |  |
| 4 | Location | Location of the package in the facility | Text |  |
| 5 | Category | Spent fuel | Text |  |
| 6 | Type | Typified description of properties | Text |  |
| 7 | Date | Date of spent fuel generation, which is used to calculate the activity | Date |  |
| 8 | Producer | Producer of spent fuel | Text |  |
| 9 | Packaging | Type-approved packaging | Text |  |
| 10 | Weight | Weight of the package | Number | kg |
| 11 | Volume | Volume of the package | Number | m3 |
| 12 | Initial enrichment in U235 | Initial enrichment of the fuel element in U-235 in percentage | Number | % |
| 13 | Burnup | Burnup of individual fuel elements by 31 December of the current year | Number | MWd/MTU |
| 14 | Thermal power | Calculated thermal power of the fuel element by 31 December of the current year | Number | W |
| 15 | Processing | Processing | Text |  |
| 16 | F processing | Further processing | Text |  |
| 18 | Radionuclides | Link to Table Ic – Inventory of radionuclides | Number |  |

Table Ic: Inventory of radionuclides in the package\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Field title** | **Explanation** | **Format** | **Unit** |
| 1 | Activity | Activity of the radionuclide on the date referred to in Table I | Number | MBq |
| 2 | Share | Percentage of radionuclide activity with regard to total activity | Number | % |
| 3 | Radionuclide | Radionuclide code | Text  or  number |  |
| 4 | Ref. No. | Package number referred to in Table I | Number |  |

\* The number of records for each package in the radionuclide inventory table shall be equal to the number of different radionuclides in the package.

Table Id: Reporting on the changes in the inventory

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Field title** | **Explanation** | **Record format** |
| 1 | Original package | Reference numbers of the original packages that have been processed in any way | Numbers separated by commas |
| 2 | Produced package | Reference numbers of the produced packages containing radioactive waste from the original packages | Numbers separated by commas |
| 3 | Processing | Sequence of codes from the code list with individual processing operations separated by commas | Numbers separated by commas |
| 4 | Date of the change | Date of the change | Date |