

FEDERAL SERVICE
FOR ENVIRONMENTAL, TECHNOLOGICAL AND NUCLEAR SUPERVISION

LICENSE

Registration number **CE-03-210-4989 as of January 14, 2021**

The license was issued to **RITVERC Joint-Stock Company (RITVERC JSC)**

Licensee location **Kurchatova str., bldg. 10, Letter K, room 2, St. Petersburg**

Primary State Registration Number of a Legal Entity (OGRN) **1027801536377**
Taxpayer Identification Number (INN) **7802001185**

The License grants the right to **operate radioactive source**

Facilities at which or in relation to which activities are carried out: **non-nuclear facility containing radioactive substances**

Reason for issuing a license: **Application of the license applicant No. 622 as of 05.11.2020; Decision of the Deputy Head of the North European Interregional Territorial Department for Nuclear and Radiation Safety Supervision of the Federal Service for Environmental, Technological and Nuclear Supervision No. 5312/B as of 14.01.2021**

License term **until January 14, 2026**

*The license is valid subject to the attached terms
of the license, which are its integral part*

Acting head of licensing authority */Signature/* **S.V. Lukovnikov**

Seal:

CERTIFICATE

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Federal Service for Environmental, Technological, and Nuclear Supervision (Rostekhnadzor)
North European Interregional Territorial Department for Nuclear and Radiation Safety Supervision
of the Federal Service for Environmental, Technological and Nuclear Supervision
(North European ITD for NRS Supervision of Rostekhnadzor)

OGRN 1037828018535

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Series A B No. 364168

**Federal Service
for Environmental, Technological, and Nuclear Supervision
North European Interregional Territorial Department for Nuclear and Radiation
Safety Supervision of the Federal Service for Environmental, Technological and Nuclear Supervision**

TERMS AND CONDITIONS

of license No. CE-03-210-4984 as of 14.01.2021, granting the right to operate a radiation source, issued to RITVERC Joint-Stock Company (RITVERC JSC).

Facility at which or in relation to which activities are carried out: a non-nuclear facility containing radioactive substances.

Section 1. Scope of the license

1.1. The license was issued based on the application and a set of documents justifying the safety of the declared activity under ref. No. 622 as of 05.11.2020.

1.2. This license covers nuclear energy use activities (hereinafter referred to as the NF), as stated in the table:

Licensee full name		Activities requiring licensing		
RITVERC Joint-Stock Company located at the address: Kurchatova str., bldg. 10, 194223, St. Petersburg		Operation of the complex containing radioactive substances in terms of handling radioactive substances when performing work related to NF		
Radiation hazardous facility at which (in relation to which) the licensed activity is carried out		Licensed Radiation Sources, Radioactive Substances and Radioactive Waste	Work related to NF*	Restrictive conditions
Block 6 (Letter D)	Room 53	BRS and SRS based on T, C-14, Na-22, C1-36, K-40, Ti-44, Mn-54, Fe-55, Co-57, Co-60, Ni-63, Cu-64, Zn-65. Ge-68, Se-75, Kr-85, Sr-85, Y-88, Zr-89, Sr-90, Tc-99, Ru-106, Cd-109, Ag-110m, Sn-113, Sn-119m, Sn-121m, I-124, I-131, Ba-133, Cs-134, Cs-137, Ce-139, Ce-144, Pm-147, Sm-151, Eu-152, Gd-153, Ir-192, Bi-207, Pb-210, Ra-226, Th-228, Th-232, U -232, U -233, U -234, U -235, U -236, U -238, U-natural, Np-237, Pu-236, Pu -238, Pu -239, Am-241; Pu	- Manufacture of BRS and SRS; - conducting R&D in relation to BRS and SRS; - acceptance of BRS and SRS; - opening of capsules containing SRS and recovery of Radioactive Substances; - spectrometric and radiometric measurements; - recharging SRS in RID; - temporary storage of BRS and SRS; - temporary storage of SRW and LRW generated during the own activities	According to the design and engineering documentation, only after completing Section 3 Clause 3.3.; - work category 2; - in a protective safe of the type SZ; - SRS based on Kr-85-50 Ci/year, T-10 Ci/year, Pm-147-5 Ci/year; - in protective boxes, fume hoods and protective containers

Acting Head of the Department for Supervision of Radiation Hazardous Facilities

/Signature/

B.Yu. Trubnikov

	Room 54	242, Am-243, Cm-244	<ul style="list-style-type: none"> - Manufacture of BRS and SRS; - conducting R&D in relation to BRS and SRS; - opening of capsules containing SRS and recovery of Radioactive Substances; - sealing capsules containing SRS; - spectrometric and radiometric measurements; - temporary storage of SRW and LRW generated during the own activities 	<p>According to the design and engineering documentation, only after completing Section 3 Clause 3.3.;</p> <ul style="list-style-type: none"> - work category 2; <p>- in protective boxes, fume hoods and protective containers</p>
Block 6 (Letter D)	Room 42	SRS based on T, C-14, Na-22, C1-36, K-40, Ti-44, Mn-54, Fe-55, Co-57, Co-60, Ni-63, Cu-64, Zn-65, Ge-68, Se-75, Kr-85, Sr-85, Sr-90, Y-88, Zr-89, Tc-99, Ru-106, Ag-110m, Cd-109, Sn-113, Sn-119m, Sn-121m, I-124, I-131, Cs-134, Cs-137, Ba-133, Ce-139, Ce-144, Pm-147, Sm-151, Eu-152, Gd-153, Ir-192, Pb-210, Bi-207, Ra-226, Th-228, Th-232, U-232, U-233, U-234, U-235, U-236, U-238, U - natural, Np-237, Pu-236, Pu-238, Pu-239, Pu-242, Am-241, Am-243, Cm-244	<ul style="list-style-type: none"> - assembling SRS into holders; - spectrometric and radiometric measurements; - monitoring SRS for leak-tightness 	<p>According to the design and engineering documentation, only after completing Section 3 Clause 3.3.;</p> <ul style="list-style-type: none"> - on a laboratory bench and a helium leak detector, in the 6BP-NZh protective box; - at SRS activity of not greater than MSA
	Room 57		<ul style="list-style-type: none"> - Spectrometric, radiometric and dosimetric measurements; - temporary storage of SRW 	<p>According to the design and engineering documentation, only after completing Section 3 Clause 3.3.;</p> <ul style="list-style-type: none"> - work category 3; - in a protective safe of type ZSS;

Room 83	SRS based on radionuclides T, C-14, Na-22, Cl-36, K-40, Ti-44, Mn-54, Fe-55, Co-57, Co-60, Ni-63, Cu-64, Zn-65, Ge-68, Se-75, Kr-85, Sr-85, Y-88, Zr-89, Sr-90, Tc-99, Ru-106, Cd- 109, Ag-110m, Sn-113, Sn-119m, Sn-121m, I-124, I-131, Ba-133, Cs-134, Cs-137, Ce-139. Ce-144, Pm-147, Sm-151, Eu-152, Gd-153, Ir-192, Bi-207, Pb-210, Ra-226, Th-228, Th-232, U-232, U-233, U-234, U-235, U-236, U-238, U - natural, Np-237, Pu-236, Pu-238, Pu-239, Am-241; Pu-242, Am-243, Cm-244	Monitoring SRS for leak-tightness using various methods; - spectrometric and radiometric measurements; - packing SRS in shipping packages; - temporary storage of SRW	According to the design and engineering documentation, only after completing Section 3 Clause 3.3.; - work category 3; - on laboratory benches and shelves; - in a protective safe of the type 2SSZ
Cargo van VOLKSWAGEN 7J0 TRANSPORTER number plate B997M0178; - cargo van RENAULT MASTER number plate B543YA178; - cargo van VOLKSWAGEN SYNIE Crafter number plate A672KY198	Packages of the type "exempt", "PU", "A", "B(U)". Radionuclides in accordance with the certificate of approval	Transportation on the territory of the Russian Federation as a single complex	According to the safety requirements specified in the certificates of approval;
Customers' facilities	SRS of radiation hazard categories 4 and 5	Mounting (dismantling) of RID units; - recharging SRS in RID units;	According to the design and engineering documentation, only after completing Section 3 Clause 3.3.;

*Note: handling radioactive substances, when performing work not listed in the table, is **PROHIBITED**.

1.3 The license is not transferable to another legal entity, its effect does not apply to other legal entities operating jointly with the Licensee, including under a cooperation agreement, as well as to legal entities, one of the founders of which is the Licensee.

1.4. Federal state supervision in the field of the use of nuclear energy during the implementation of an authorized type of activity and control over compliance with these license terms and conditions (hereinafter referred to as the LTC) is assigned to the territorial Division for Inspection of Radiation Hazardous Facilities of the North European Interregional Territorial Department for Nuclear and Radiation Safety Supervision of the Federal Service for Environmental, Technological and Nuclear Supervision (hereinafter referred to as the Inspection Division).

Section 2. General terms and conditions

2.1. Within 30 days after receiving the license, the Licensee must:

- develop measures for implementation of the LTC data requirements;
- submit to the North European Interregional Territorial Department for Nuclear and Radiation Safety Supervision (hereinafter referred to as the Department), as well as to the structural division of the Department supervising compliance with LTC data, information and copies of documents:
 - on the activities for implementation of the license;
 - on the appointment of people responsible for compliance with the LTC and for monitoring their implementation;
 - on measures to ensure the availability of copies of the license and the conditions for its validity in the divisions of the Licensee located at the place that is different from the main location of the Licensee.

2.2. When carrying out the authorized activities, the Licensee must:

2.2.1. Ensure compliance with the periods of validity of approval documents (licenses, permits, hygiene certificates, etc.) of the state safety regulation authorities related to NF, as well as their prompt re-issuance;

2.2.2. Ensure the compliance of design, engineering, process, operating documentation and documents justifying the safety of a nuclear facility and the activities authorized by the LTC with the requirements of nuclear regulatory documents;

2.2.3. Ensure compliance with the requirements of regulatory and operating documents, including safe operation limits, and of these LTC;

2.2.4. Ensure physical protection of Radioactive Substances and Radioactive Waste in accordance with the requirements of the NF regulatory documents, design and departmental documentation for ensuring physical protection;

2.2.5. Ensure control and accounting of Radioactive Substances and Radioactive Waste in accordance with the requirements of the NF regulatory documents, design and departmental documentation for ensuring control and accounting of Radioactive Substances and Radioactive Waste;

2.2.6. Ensure control over the technical condition, maintenance and repair of systems and components affecting the safety of the authorized activities, to the extent necessary to maintain them in good order. Implement measures to extend their service life and life time in accordance with the "Requirements for justification of the possibility to extend the design service life for nuclear facilities" (NP-024-2000). These systems and components must be accompanied by the necessary operating documentation (data sheets, certificates, product specifications, operating instructions, etc.);

2.2.7. Have a set of (hard copy):

- legal and regulatory documentation regulating the implementation of authorized activities;
- design, engineering, process and operating documentation applicable to authorized activities;
- documents justifying safety in the course of authorized activities;
- guidance materials (methods, guidelines, instructions), according to which the authorized type of activity should be carried out;

2.2.8. Ensure the storage of design, engineering and process documentation, based on which the authorized activities at a nuclear facility are carried out, and the documentation reflecting changes and amendments to it made at these stages of its life cycle, up to the specified final state of the facility under decommissioning;

2.2.9. Appoint responsible persons in accordance with the list of positions of employees who must obtain permits from the Federal Service for Environmental, Technological and Nuclear Supervision for the right to conduct work related to NF, developed according to the requirements of Resolution of the Government of the Russian Federation No. 240 as of 03.03.1997;

2.2.10. Maintain the number and qualifications of employees (personnel) and responsible persons in charge of the safe implementation of authorized types of activities, conducting radiation hazardous work and ensuring radiation safety, and for doing this:

- plan and carry out training and advanced training of employees (personnel) in accordance with the current organization's training system, and responsible persons, at least once every three years;

- ensure obtaining by employees (personnel) permits for the right to conduct work provided for by Order of the Federal Service for Environmental, Technological and Nuclear Supervision No. 623 as of 19.12.2018 "On approval of the Administrative rules for submission of the state service for issuing permits for the right to carry out work in the field of nuclear energy use to employees of nuclear facilities by the Federal Service for Environmental, Technological and Nuclear Supervision", taking into account deputizing;

- ensure admission to work with Radiation Sources, Radioactive Substances of persons who meet the established qualification requirements, have no medical contraindications for work at nuclear facility, do not have an unexpunged or unspent conviction for the commission of a premeditated crime, as well as the unlisted organizations and individuals, in relation to which the information about their involvement in extremist activity or terrorism is available;

2.2.11. When amending the requirements of the existing regulatory documents and introducing the new ones:

- analyze the impact of the identified deviations from new requirements on safety;

- ensure the development and implementation of action plans to eliminate and/or compensate for deviations affecting safety;

2.2.12. Monitor the radiation environment and personnel radiation doses, taking into account the control levels and following the established volume, type and frequency of radiation monitoring;

2.2.13. Revise (adjust, enlarge) radiation safety instructions, other regulatory and administrative documents establishing requirements for ensuring radiation safety, physical protection, accounting and control of Radioactive Substances and Radioactive Waste during the implementation of activities permitted by the LTC, at least once every 5 years and when revising regulatory legal acts and regulations that were used in the course of their development;

2.2.14. Ensure the organization of development and implementation of quality assurance programs at all stages of operation and decommissioning of Radiation Sources, and monitoring their implementation;

2.2.15. Carry out mandatory certification of the manufactured equipment, products and technologies (hereinafter referred to as the EPT) according to the current NF guidance documents, and have hygiene certificates for the above EPT;

2.2.16. Provide the Department and Inspection Division with the requested information, materials and documentation necessary for safety assessment, and provide representatives of the Federal Service for Environmental, Technological and Nuclear Supervision (hereinafter referred to as the Service) with the opportunity to obtain such information directly from the employees (personnel) of the Licensee;

2.2.17. Submit to the Inspection Division, along with an annual report, a list of organizations involved in the performance of work and the provision of services, stating the nature of this work and the registration numbers of licenses issued to these organizations once a year.

When concluding contracts with legal entities that perform work or provide services related to NF, the Licensee must include into them the requirements:

- to conformity assessment of radiation sources governed by the laws of the Russian Federation;

- to delimitation of responsibilities for ensuring physical protection, radiation monitoring, radiation safety during transportation, storage, acceptance, delivery of Radioactive Substances, Radiation Sources, and transfer of Radioactive Waste;

2.2.18. Constantly inform the Department and Inspection Division about new data, changes and additions made to the set of documents, based on which this license was obtained.

Any alterations affecting the safety of Radiation Source (changes in the composition of Radiation Source, changes in the operating conditions of Radiation Source, development of new equipment, modification of Radiation Source or its systems and components, etc.) must be accurately and timely reflected in the Radiation source safety analysis report (Hereinafter referred to as the RS SAR).

Maintaining the correspondence of the content of RS SAR to the real state in terms of the Radiation Source safety justification is carried out by making the necessary additions (changes) to it and submitting them to the Department and Inspection Division;

2.2.19. Ensure the preparation and timely transmission by an official of information on violations and abnormalities in control and accounting of Radioactive Substances and Radioactive Waste, unauthorized activities in relation to Radioactive Substances, Radioactive Sources and Storage Facilities according to the requirements established in federal rules and standards related to NF, and to the duty official in the Department.

Carry out training and maintenance in constant readiness of emergency response teams consisting of employees (personnel);

2.2.20. Upon receipt of orders from the bodies (officials) of the Service to eliminate the revealed violations of the requirements of technical regulations, federal rules and standards related to NF and these LTC, the Licensee shall have to send the required information on planned measures to eliminate violations to the addresses specified in the order, no later than the deadlines specified in the orders.

The Licensee must also send to the addresses specified in the order information on the implementation of measures to eliminate violations and fulfill the orders in accordance with the established deadlines.

Should it be impossible to fulfill the order (clause of the order) within the prescribed deadline for reasons beyond the control of the Licensee, to whom the order was issued, the Licensee will, **no later than 10 working days** before the order deadline expiration, have the right to contact the body (official) of the Service that issued the order, providing a reasoned statement on the extension of the order (clause of the order) deadline by sending a written application justifying the need to extend the deadline, indicating compensating measures to ensure safety with a justification of their efficiency and sufficiency;

2.2.21. Provide information to the Inspection Division about the planned repair, upgrading and commissioning of equipment used in the implementation of authorized activities and affecting radiation safety, and notify the Inspection Division about the date of commencement of work performed by third-party organizations before starting work at the nuclear facility;

2.2.22. Submit annual radiation safety state reports to the Inspection Division.

Reports must be submitted no later than December 25 and contain information in accordance with the "Recommendations on the composition and content of the report on the state of radiation safety in organizations using radionuclide sources" (RB-054-20);

Until February 10 - information on submission of annual accounts according to the forms of the state control and accounting of Radioactive Substances and Radioactive Waste to the relevant information and analysis centers;

2.2.23. Inform the Inspection Division about the planned or forced termination of NF activities, including due to impossibility or inexpediency of further use of radiation sources for their intended purpose. Term: within 10 working days from the date of taking a decision to terminate nuclear energy use activities;

2.2.24. Maintain financial support for the limit of liability for losses and damage caused to legal entities and individuals by radiation exposure during the performance of authorized activities. Timely submit to the Inspection Division a copy of the document confirming the availability of the specified financial support;

2.2.25. Ensure continuous insurance of civil liability for possible losses and damage caused by radiation exposure;

2.2.26. Submit documents (materials) confirming the fulfillment of measures to implement the requirements of the LTC within the relevant time frame;

2.2.27. Should the authorized body or the court make a decision to reorganize legal entity, initiate bankruptcy proceedings in relation to it or liquidate it, the head of the legal entity will, no later than 3 working days from the date of the relevant decision, notify the Inspection Division and the Department about the commencement of the reorganization, bankruptcy or liquidation (hereinafter referred to as the special working conditions) procedure in writing.

During the period of special working conditions, a legal entity shall conduct an unscheduled inventory checking radiation sources, radioactive substances and their products, and radioactive waste. The legal entity shall inform the Inspection Division about terms and results of the inventory checking.

2.3. Ensure delivery of Radioactive Waste and SRS (BRS), not applicable for further use, to dedicated enterprises that have licenses for this type of activity within the framework of their LTC.

2.4. When carrying out authorized activities, the Licensee is prohibited from:

- using Radioactive Source (SRS) with expired specified operating (service) life for its intended purpose;
- operating Radioactive Source (as a facility) beyond the specified time as established by the design documentation;
- operating Radioactive Source in breach of the limits and conditions established by the operating documentation, including safe operation limits;
- operating inoperable and faulty Radioactive Sources and their systems and components for the safety of Radioactive Sources;
- purchasing, supplying or leasing radiation sources and radioactive substances to any legal entity or individual that does not have licenses or approval of the Service to carry out the relevant NF activities;
- operating and supplying radiation sources and radioactive substances to nuclear facilities without assessing the compliance of products with the requirements related to ensuring safety in the field of nuclear energy use;
- entering into relations on the receipt and provision of NF services affecting the safety of the activities the Licensee is authorized to perform with legal entities and individuals that do not have licenses from the Service to carry out the relevant NF activities.

2.5. If the Licensee intends to continue performance of the authorized activities after the expiration of this license, it is recommended, **no later than 6 months** before the expiration of the license, to

submit to the Office that issued this license, an application for a license for the subsequent validity period attaching a set of supporting documents according to the established procedure.

2.6. Any changes affecting the Radioactive Source safety require registration of a change to the LTC.

Changes to the LTC shall be introduced according to clauses 29, 30 of "Regulations on licensing activities in the field of nuclear energy use" approved by the Resolution of the Government of the Russian Federation No. 280 as of 29.03.2013 (hereinafter referred to as the Regulations) in the manner prescribed by Clause 158 of "Administrative rules for submission of the state service for licensing the activities in the field of nuclear energy use by the Federal Service for Environmental, Technological and Nuclear Supervision" approved by order of the Federal Service for Environmental, Technological and Nuclear Supervision No. 453 as of October 08, 2014 (hereinafter referred to as the Rules).

The Licensee is allowed to carry out work with the modified LTC only after it receives a documented change to the LTC from the Department.

2.7. In case a legal entity (licensee) is reorganized by means of transformation, changing its location or name, this legal entity (its legal successor) shall, within 15 working days from the date of the relevant registration, reorganization, change of location or name, submit to the licensing body an application for renewal a license, unless otherwise provided by federal law.

License renewal is carried out according to cl. 42, 43 of the Regulations in the manner prescribed by cl. 113-122 of the Rules.

2.8. Authorized activities can be suspended based on and in accordance with cl. 33, 34 of the Regulations.

2.9. License can be terminated (or canceled) based on the results of an audit (inspection) on the grounds of and in accordance with cl. 35, 36, 37 of the Regulations in the manner prescribed by cl. 124-134 of the Rules and clause 1 of Appendix 7 of the Rules.

2.10. The Licensee must provide authorized representatives of the Service with free access to the facilities of authorized activities in order to fulfill their duties, and when supervising the progress of investigation of violations, with the information, communication means, documentation and investigation materials needed to perform investigation, as well as to provide access to the place of violation. When conducting an inspection by officials of the Service, the Licensee shall provide safety induction, assignment of accompanying persons and, if necessary, personal protective equipment, personal dosimetry monitoring equipment.

2.11. The Licensee must carry out the authorized activities in compliance with:

2.11.1 The legislation of the Russian Federation, regulatory legal acts of the President of the Russian Federation and the Government of the Russian Federation, federal rules and standards related to NF;

2.11.2 Radiation safety criteria and requirements established by the federal executive authorities performing state regulation of NF safety by means of rules, regulations, guidelines, resolutions and other regulatory documents;

2.11.3 Standards and other regulatory documents that establish requirements for implementation of authorized activities and facilities for application thereof;

2.11.4 Instructions and regulations on radiation safety in force at the Licensee's facilities, developed based on and according to the requirements of the above documents;

2.11.5 These LTC.

Section 3. Special terms and conditions

The Licensee must:

3.1. Perform authorized activities observing restrictions and established limits of safe operation in accordance with the engineering (design, operating, etc.) documentation and Section 1 of these LTC;

3.2. Develop and implement measures to eliminate or compensate for reasonable comments of expert opinion No. 2020-11/AЭ/Э-221 as of 16.12.2020 as stated below:

- obtain a hygiene certificate for all premises and all radionuclides indicated in the claimed activity, on their compliance with state health and hygiene rules and standards;

- develop a procedure for terminating the claimed activity and decommissioning the nuclear facility in accordance with the requirements of Section VII of NP-038-16;

- update "Instructions No. 6-RB on actions to be taken by personnel in emergencies" according to the requirements of NP-014-16;

- update the "Plan of actions for protection of personnel in the event of a radiation accident at RITVERC JSC" in accordance with the claimed activity.

Information on the implementation of these clauses should be submitted to the Inspection Division by 05.04.2021.

3.3. Operation of BRS, SRS and RW is allowed only after receiving a hygiene certificate on the compliance of working conditions with state health and hygiene rules and standards, and submitting it to the Inspection Division.

Acting Head of the Department for Supervision of Radiation Hazardous Facilities of the North European Interregional Territorial Department for Nuclear and Radiation Safety Supervision of the Federal Service for Environmental, Technological and Nuclear Supervision

/Signature/

B.Yu. Trubnikov

Seal:

FOR REGISTRATION OF LICENSES

FEDERAL SERVICE

FOR ENVIRONMENTAL, TECHNOLOGICAL AND NUCLEAR SUPERVISION

List of revisions to the license terms and conditions

Revision No.	Revision date	Reason for revision	Revised clauses of license terms and conditions
1	2	3	4