Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Státní ústav radiační ochrany, v.v.i.

CAB number 1479, SÚRO Testing Laboratories Bartoškova 1450/28, 140 00 Praha 4

Testing laboratory locations:

1. I	Branch Hradec Králové	Piletická 57/15A, 500 03 Hradec Králové
2. I	Monitoring Department	Bartoškova 1450/28, 140 00 Praha 4
3. I	Branch Ostrava	Syllabova 1198/21, 703 00 Ostrava
4. I	Medical Exposure Department	Bartoškova 1450/28, 140 00 Praha 4
5. I	Dosimetry Department	Bartoškova 1450/28, 140 00 Praha 4
6. ľ	Natural Radiation Sources Department	Bartoškova 1450/28, 140 00 Praha 4

The laboratory provides opinions and interpretations of the test results.

Detailed information on activities within the scope of accreditation (tested subject) is given in the section "Specification of the scope of accreditation".

1. Branch Hradec Králové

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	-
2	Determination of gross alpha activity concentration in water by measurement of evaporation residue and scintillator ZnS(Ag) mixture	SZP 2 (ČSN 75 7611)	Water	-
3	Determination of gross beta activity concentration in water by beta particles measurement in ignited evaporation residue by a window proportional counter	SZP 3 (ČSN 75 7612)	Water	-
4	Determination of ²²² Rn activity concentration in water by measurement of gamma rays	SZP 4 (ČSN 75 7624)	Water	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

Specification of the scope of accreditation:

Ordinal test number Detailed information on activities within the scope of accreditation (tested subject)	
2, 3, 4	Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utility, raw, sea, sewage, process

2. **Monitoring Department**

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

the laboratory does not apply a flexible approach to the scope of accreditation

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CAB number 1479, SÚRO Testing Laboratories Bartoškova 1450/28, 140 00 Praha 4

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	-
2	Determination of gross alpha activity concentration in water by measurement of evaporation residue and scintillator ZnS(Ag) mixture	SZP 12 (ČSN 75 7611)	Water	-
3	Determination of gross beta activity concentration in water by beta particles measurement in ignited evaporation residue by a window proportional counter	SZP 13 (ČSN 75 7612)	Water	-
4	Determination of ⁹⁰ Sr activity after chemical separation by the proportional beta counting	SZP 14 (VDI 123)	Food chain samples, water, aerosols in filters	-
5	In vivo radiobioassay by gamma- ray spectrometry and determination of committed effective dose by calculation from measured values	SZP CTP 1 (VDI 127; SÚJB Recommendation: Individual monitoring for activities involving exposure to ionizing radiation. Part II Internal exposure)	Human body, internal radiation exposure of persons	-

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
2, 3, 4	Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utility, raw, sea, sewage, process

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

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3. Branch Ostrava

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	-
2	Determination of ⁹⁰ Sr activity after chemical separation by the proportional beta counting	SZP 35 (VDI 123)	Food chain samples, water	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
2	Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utility, raw, sea, sewage, process

4. Medical Exposure Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of patient dose and image quality by thermoluminescence dosimeters and x-ray films (postal TLD dental inspection)	SOP 1	Dental intraoral x-ray equipment	-
2	Determination of attenuation properties of materials by iontometric method in Isovolt Titan x-ray beams	SOP 09 (ČSN EN 61331-1)	Protective devices against diagnostic medical X-radiation	-
3	Determination of air kerma and air kerma rate by iontometric method in Isovolt Titan x-ray beams and in OG-8 gamma ray beams	SOP 10 (IAEA TRS No. 457; IAEA TRS No. 469)	Ionizing radiation fields (photons only)	-

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

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- asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises
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- the laboratory does not apply a flexible approach to the scope of accreditation

5. **Dosimetry Department**

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of personal doses from external exposure using TLD Harshaw 6600 system	M1	External radiation exposure of persons	-
2	Determination of H*(10) and H'(0.07) using TLD Harshaw 6600 system	M2	Ionizing radiation field	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

6. Natural Radiation Sources Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1*	Determination of radon activity concentration using continuous monitor based on detection of alpha radiation	M12 (SÚJB Recommendation: Measurement and evaluation of exposure from natural radiation sources in buildings with habitable or living rooms; SÚJB Recommendation: Determination of personal doses to workers in workplaces with material containing elevated levels of natural radionuclides; SÚJB Recommendation: Determination of personal doses to workers in workplaces with possible elevated exposure from radon)	Indoor air of buildings, NORM and radon workplaces	

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
2*	Determination of the time average radon activity concentration by electret dosimetry system RM1	M13 (SÚJB Recommendation: Measurement and evaluation of exposure from natural radiation sources in buildings with habitable or living rooms; SÚJB Recommendation: Determination of personal doses to workers in workplaces with material containing elevated levels of natural radionuclides; SÚJB Recommendation: Determination of personal doses to workers in workplaces with possible elevated exposure from radon)	Indoor air of buildings, NORM and radon workplaces	

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

Abbreviations

CTP Whole-Body Counter

H*(10) Ambient dose equivalent at a depth of 10 mm H'(0.07) Directional dose equivalent at a depth of 0.07 mm

IAEA International Atomic Energy Agency

M Method

NORM Naturally occurred radioactive materials

SOP Standard Operating Procedure SÚJB State Office for Nuclear Safety SZP Standard Operating Procedure TLD Thermoluminescence dosimetry

TRS Technical Reports Series

VDI State Office for Nuclear Safety Guideline

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

the laboratory does not apply a flexible approach to the scope of accreditation

[&]quot;This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."