

**The Appendix is an integral part of
Certificate of Accreditation No. 593/2022 of 06/12/2022**

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

ELVAC EKOTECHNIKA s.r.o.
Emission and Immission Measurement Laboratory
Tavičská 337/23, 703 00 Ostrava – Vítkovice

Tests:

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
1*	Determination of the velocity and volume flow rate	EKO-SOP-E01/2 (ČSN ISO 10780)	Waste gas
2*	Determination of the moisture content of gas (condensation method, capacitance detector)	EKO-SOP-E02/2 (ČSN EN 14790)	Waste gas
3*	Determination of the concentration of oxygen (paramagnetic method)	EKO-SOP-E03/2 (ČSN EN 14789)	Waste gas
4*	Determination of the mass concentration of solid pollutants by calculation from measured values ³	EKO-SOP-E04/2 (ČSN ISO 9096:1998, ČSN EN 13284-1)	Waste gas
5*	Determination of the mass concentration of solid pollutants (sulphur dioxide, nitrogen oxides, carbon monoxide) by automated analysers (NDIR), nitrogen oxides - chemiluminescence	EKO-SOP-E05/2 (ČSN EN 15058, ČSN ISO 7935, ČSN ISO 10849, ČSN EN 14792)	Waste gas
6*	Determination of total mass concentration of organic compounds expressed as total organic carbon (TOC) by automatic analysers (FID)	EKO-SOP-E06/2 (ČSN EN 12619)	Waste gas
7	Determination of the mass concentration of metals by calculation from measured values ³ (Sb, As, Sn, Cr, Co, Cd, Cu, Mn, Ni, Pb, Tl, V, Zn, Hg, Be, Te, Se)	EKO-SOP-E07/2 (ČSN EN 14385, ČSN EN 13284-1) (ČSN EN 13211)	Waste gas

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Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
8	Determination of the mass concentration of volatile organic compounds (VOC) by calculation from measured values ³	EKO-SOP-E08/2 (ČSN P CEN/TS 13649, ČSN EN ISO 16017-1)	Waste gas
9	Determination of the mass concentration of persistent organic compounds by calculation from measured values ³	EKO-SOP-E09/2 (ČSN EN 1948-1, ČSN EN 1948-4+A1)	Waste gas
10	Determination of the mass concentration of gases and vapours by calculation from measured values ³ (HCl, HF, NH ₃ , H ₂ S, SO ₂)	EKO-SOP-E10/2 (ČSN EN 1911, ČSN P CEN/TS 17340, ČSN 83 4728-2, ČSN 83 4712-2, ČSN EN 14791)	Waste gas
11. *	Quality assurance of automated measuring systems	EKO-SOP-E11/2 (ČSN EN 14181 cl.6 QAL2, cl.8 AST)	Automated emission measuring systems

¹ asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

² 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 edition of the specified procedure is used (including any changes)

³ the laboratory determination of an analyte in the sample is subcontracted to an accredited testing laboratory

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Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
1	Sampling of solid pollutants (isokinetic sampling with automated or manual isokinetic control)	EKO-SOP-E04/V2 (ČSN ISO 9096:1998, ČSN EN 13284-1)	Waste gas
2	Sampling for the determination of metals (Sb, As, Sn, Cr, Co, Cd, Cu, Mn, Ni, Pb, Tl, V, Zn, Hg, Be, Te, Se) - isokinetic sampling with automatic isokinetic control)	EKO-SOP-E07/V2 (ČSN EN 14385, ČSN EN 13284-1, ČSN EN 13211)	Waste gas
3	Sampling of volatile organic compounds (VOC) by capture on a solid sorbent	EKO-SOP-E08/V2 (ČSN P CEN/TS 13649, ČSN EN ISO 16017-1)	Waste gas
4	Sampling for the determination of persistent organic compounds (PCDD/F, PCB, PAH) - isokinetic sampling with automatic isokinetic control, filtration condensation method	EKO-SOP-E09/V2 (ČSN EN 1948-1, ČSN EN 1948-4+A1)	Waste gas
5	Sampling of gases and vapours by absorption in a liquid (HCl, HF, NH ₃ , H ₂ S, SO ₂)	EKO-SOP-E010/V2 (ČSN EN 1911-1, ČSN P CEN/TS 17340, ČSN 83 4728-2, ČSN 83 4712-2, ČSN EN 14791)	Waste gas

¹ if the document identifying the sampling procedure is dated, only these specific procedures are used, if the document identifying the sampling procedure is not dated, the latest edition of the specified procedure is used (including any changes)

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Explanations:

EKO-SOP	– Standard Operating Procedure
TOC	– The sum of volatile organic compounds expressed as total organic carbon
VOC	– Volatile Organic Compounds
NDIR	– Non-Dispersive Infrared Spectrometry
FID	– flame ionization detection
PCDD/F	– Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans
PCB	– Polychlorinated Biphenyls
PAH	– Polycyclic Aromatic Hydrocarbons
Emissions	– Waste gas containing pollutants released in a controlled manner or leaking into atmosphere from sources of pollution
QAL2	– Calibration and validation of automated measuring systems
AST	– Annual verification of the accuracy of automated measuring systems