

**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

The Laboratory has a flexible scope of accreditation permitted as detailed in the Annex.

Updated list of activities provided within the flexible scope of accreditation is available from the Laboratory Manager.

The Laboratory is qualified to carry out independent sampling.

Tests:

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
1	Determination of sulphate by titration	SOP 01 (ČSN 75 7477)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
2	Determination of As, Be, Cd, Mo, Pb, Sb, Se, V by AAS – Electrothermal Atomization method	SOP 02 (ČSN EN ISO 15586; ČSN EN ISO 5961)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
3	Determination of As, Cd, Pb by AAS – Electrothermal Atomization method	SOP 02 A (ČSN EN ISO 15586; ČSN EN ISO 5961; JPP ÚKZÚZ – Analysis of vegetable material)	Food, agricultural products, feedstuffs, vegetable material
4	Determination of As, Be, Cd, Mo, Pb, Sb, Se, V by AAS – Electrothermal Atomization method	SOP 02 C (ČSN EN ISO 15586; ČSN EN ISO 5961; ČSN 46 5735; ČSN 72 1227; JPP ÚKZÚZ – Analysis of soils II)	Waste, soils, sludge, sediments, sand, fertilizers
5	Determination of total mercury by AMA analyzer	SOP 03 (ČSN 75 7440; ČSN 46 5735; ČSN 72 1227; JPP ÚKZÚZ – Analysis of soils II; JPP ÚKZÚZ – Analysis of vegetable material)	Water ⁴ , purified water and boiler water, aqueous extracts of waste, food, agricultural products, feedstuffs, vegetable material, waste, soils, sludge, sediments, sand, fertilizers
6	Determination of dissolved reactive silicon by photometry and their forms (SiO ₂ , Silicic acid) by calculation from measured values	SOP 04 (ČSN 75 7481)	Water ⁴ , purified water and boiler water
7	Determination of chemical oxygen demand (COD _{Cr}) by titration	SOP 05 (ČSN ISO 6060)	Water ⁴ , aqueous extracts of waste

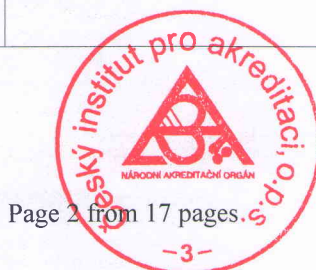


**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
8	Determination of biochemical oxygen demand after 5 days (BOD ₅) by optical luminescence method	SOP 06 (ČSN EN ISO 5815-1)	Water ⁴ , aqueous extracts of waste
9	Determination of nitrate nitrogen by photometry and nitrate by calculation from measured values	SOP 07 (ČSN ISO 7890-3)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
10	Determination of anionic surfactants by photometry	SOP 08 (ČSN EN 903)	Water ⁴ , aqueous extracts of waste
11	Determination of ammonia nitrogen by photometry, inorganic, total nitrogen and ammonium by calculation from measured values	SOP 09 (ČSN ISO 7150-1)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
12	Determination of phosphorus and phosphate by photometry and P ₂ O ₅ by calculation from measured values	SOP 10 (ČSN EN ISO 6878)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
13	Determination of nitrite nitrogen by photometry and nitrite by calculation from measured values	SOP 11 (ČSN EN 26777)	Water ⁴ , purified water, aqueous extracts of waste
14	Determination of polycyclic aromatic hydrocarbons (PAH) by liquid chromatography method (HPLC/FLD+UV) ³	SOP 12 (ČSN EN ISO 17993; ČSN 75 7554)	Water ⁴ , aqueous extracts of waste
15	Determination of polycyclic aromatic hydrocarbons (PAH) by liquid chromatography method (HPLC/FLD+UV) ³	SOP 12 A (ČSN EN 16181)	Waste, soils, sludge, sediments, sand, fertilizers
16	Determination of polychlorinated biphenyls (PCB), organochlorine pesticides (OCP) by gas chromatography method (GC/ECD) ³	SOP 13 (ČSN EN ISO 6468)	Water ⁴ , aqueous extracts of waste
17	Determination of polychlorinated biphenyls (PCB), organochlorine pesticides (OCP) by gas chromatography method (GC/ECD) ³	SOP 13 A (ČSN EN 61619; ČSN EN 12766-1; ČSN EN 17322)	Waste, soils, sludge, sediments, fertilizers, insulating liquids

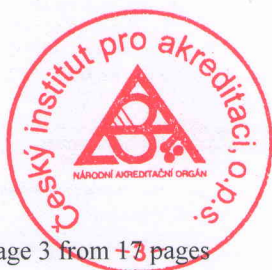


**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
18	Determination of univalent phenols volatilising with water steam by photometry	SOP 15 (ČSN ISO 6439)	Water ⁴ , aqueous extracts of waste
19	Determination of boron by photometry	SOP 16 (ČSN ISO 9390)	Water ⁴ , purified water, aqueous extracts of waste
20	Visual determination of colour	SOP 17 (ČSN EN ISO 7887)	Water ⁴ , purified water
21	Determination of total and easily liberatable cyanides by photometry	SOP 19 (ČSN ISO 6703-2; ČSN 75 7415)	Water ⁴ , aqueous extracts of waste
22	Determination of total and easily liberatable cyanides by photometry	SOP 19 A (ČSN ISO 6703-2; ČSN 75 7415)	Waste, soils, sludge, sediments
23	Determination of fluoride by potentiometry ISE	SOP 21 (ČSN ISO 10359-1)	Water ⁴ , purified water, aqueous extracts of waste
24	Determination of humic substances by photometry	SOP 22 (ČSN 75 7536)	Water ⁴
25	Determination of elements (Ag, Al, Ba, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, Zn, V) by flame AAS method	SOP 23 (ČSN 75 7385; ČSN ISO 7980; TNV 75 7408; ČSN ISO 8288; ČSN EN 1233; ČSN 75 7400; ČSN EN ISO 12020)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
26	Determination of elements (Ag, Al, Ba, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, Zn, V) by flame AAS method	SOP 23 A (ČSN 75 7385; ČSN ISO 7980; TNV 75 7408; ČSN ISO 8288; ČSN EN 1233; ČSN 75 7400; ČSN EN ISO 12020; JPP ÚKZÚZ – Analysis of vegetable material; JPP ÚKZÚZ – Analysis of feedstuffs)	Food, agricultural products, feedstuffs, vegetable material

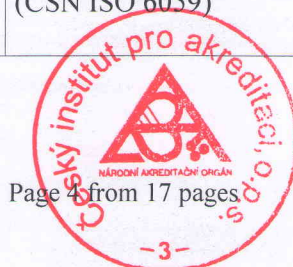


**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
27	Determination of elements (Ag, Al, Ba, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, Zn, V) by flame AAS method and CaO and MgO by calculation from measured values	SOP 23 C (ČSN 75 7385; ČSN ISO 7980; TNV 75 7408; ČSN ISO 8288; ČSN EN 1233; ČSN 75 7400; ČSN EN ISO 12020; ČSN 46 5735; ČSN 72 1227; JPP ÚKZÚZ – Analysis of soils)	Waste, soils, sludge, sediments, sand, fertilizers
28	Determination of suspended solids; method by filtration through glass fibre filter by gravimetry	SOP 24 (ČSN EN 872)	Water ⁴
29	Determination of dissolved solids (DS) and dissolved inorganic salts (DIS) by gravimetry	SOP 25 (ČSN 75 7346; ČSN 75 7347)	Water ⁴ , aqueous extracts of waste
30	Determination of base (neutralizing) capacity BNC _{4,5} and BNC _{8,3} by titration	SOP 26 (ČSN 75 7372)	Water ⁴ , boiler water
31	Determination of chemical oxygen demand with permanganate (COD _{Mn}) by titration	SOP 27 (ČSN EN ISO 8467)	Water ⁴ , purified water, boiler water
32	Determination of Na and K by flame emission spectrometry method	SOP 28 (ČSN ISO 9964-3)	Water ⁴ , purified water, aqueous extracts of waste
33	Determination of Na and K by flame emission spectrometry method	SOP 28 A (JPP ÚKZÚZ – Analysis of vegetable material; JPP ÚKZÚZ – Analysis of feedstuffs)	Feedstuffs, vegetable material, food, agricultural products
34	Determination of Na and K by flame emission spectrometry and Na ₂ O and K ₂ O by calculation from measured values	SOP 28 B (ČSN 72 1227; JPP ÚKZÚZ – Analysis of soils)	Soils, sludge, sediments, fertilizers, biodegradable waste
35	Determination of the sum of calcium and magnesium. EDTA titrimetric method	SOP 29 (ČSN ISO 6059)	Water ⁴ , purified water, boiler water

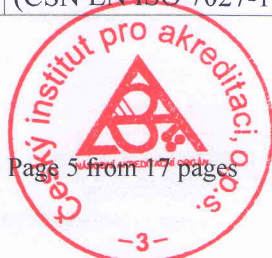


**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
36	Determination of absorbance by photometry	SOP 30 (ČSN 75 7360)	Water ⁵
37*	Determination of free and total chlorine by the analytical commercial set of MERCK/HACH and bound chlorine by calculation from measured values	SOP 31 (MERCK/HACH firm publication)	Water ⁵ , purified water
38	Determination of dry matter and annealing residue (ash) by gravimetry, water content (moisture) and loss of ignition (combustible matter) by calculation from measured values	SOP 32 (ČSN ISO 11465; ČSN 46 5735; ČSN 72 1227; ČSN EN 15934; ČSN EN 15935)	Waste, soils, sludge, sediments, fertilizers, input and output from BPS
39	Determination of dry matter and annealing residue (ash) by gravimetry, water content (moisture) and loss of ignition (combustible matter) by calculation from measured values	SOP 32 A (JPP ÚKZÚZ – Analysis of vegetable material; JPP ÚKZÚZ – Analysis of feedstuffs)	Feedstuffs, vegetable material, agricultural products
40	Determination of nonpolar extractives (NEL) by infrared spectrometry method	SOP 33 (ČSN 75 7505:1998)	Water ⁴ , boiler water, aqueous extracts of waste
41	Determination of nonpolar extractives (NEL) by infrared spectrometry method	SOP 33 A (TNV 75 8052)	Waste, soils, sludge, sediments, fertilizers
42	Determination of extractives (EL) by infrared spectrometry method	SOP 34 (ČSN 75 7506)	Water ⁴ , boiler water, aqueous extracts of waste
43*	Determination of temperature	SOP 39 (ČSN 75 7342)	Water ⁴ , boiler water
44	Determination of volatile organic compounds by gas chromatography (GC/ECD+FID) ³	SOP 40 (ČSN EN ISO 15680)	Water ⁴ , aqueous extracts of waste
45	Determination of volatile organic compounds by gas chromatography (GC/ECD+FID) ³	SOP 40 A (ČSN EN ISO 15680)	Waste, soils, sludge, sediments
46	Determination of turbidity by nephelometry	SOP 41 (ČSN EN ISO 7027-1)	Water ⁴ , purified water



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

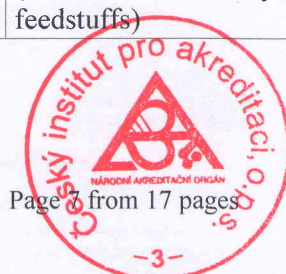
Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
47*	Determination of pH by potentiometry	SOP 43 (ČSN ISO 10523)	Water ⁴ , purified water, boiler water, aqueous extracts of waste, impregnation solutions
48	Determination of pH by potentiometry	SOP 44 (ČSN ISO 10390; ČSN EN 13037; ČSN EN 15933; JPP ÚKZÚZ – Analysis of soils; ČSN 46 5735)	Waste, soils, sludge, sediments, fertilizers, feedstuffs, input and output from BPS
49	Determination of acceptable nutrients in soils – Mg, Ca – by flame AAS method	SOP 45 (JPP ÚKZÚZ – Analysis of soils)	Soils, sediments
50	Determination of acceptable nutrients in soils – K – by flame emission spectrometry	SOP 45 A (JPP ÚKZÚZ – Analysis of soils)	Soils, sediments
51	Determination of acceptable nutrients in soils – P – by photometry	SOP 45 B (JPP ÚKZÚZ – Analysis of soils)	Soils, sediments
52	Determination of conductivity by conductometry	SOP 46 (JPP ÚKZÚZ – Analysis of soils; ČSN 46 5735; ČSN ISO 11265)	Soils, sludge, sediments, fertilizers
53	Determination of oxidable carbon by photometry	SOP 47 (JPP ÚKZÚZ – Analysis of soils; ČSN 46 5735)	Soils, sludge, sediments, fertilizers
54	Determination of indecomposable foreign matter	SOP 48 (ČSN 46 5735)	Fertilizers
55	Determination of aluminium by photometry	SOP 49 (ČSN ISO 10566)	Water ⁴ , purified water, aqueous extracts of waste
56	Determination of acid neutralizing capacity ANC _{4,5} and ANC _{8,3} by titration	SOP 50 (ČSN EN ISO 9963-1)	Water ⁴ , boiler water
57	Determination of adsorbable organically bound halogens (AOX) by coulometry	SOP 51 (ČSN EN ISO 9562)	Water ⁴ , aqueous extracts of waste
58	Determination of adsorbable organically bound halogens (AOX) by coulometry	SOP 51 A (ČSN EN 16166)	Waste, soil, sludge, sediments, fertilizers

**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
59*	Determination of electrical conductivity	SOP 52 (ČSN EN 27888)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
60	Determination of extractable organically bound halogens (EOX) by coulometry	SOP 53 (DIN 38414-S17)	Waste, soils, sludge, sediments
61	Determination of chlorides by titration	SOP 54 (ČSN ISO 9297)	Water ⁴ , purified water, aqueous extracts of waste
62	Determination of total organic carbon (TOC) and dissolved organic carbon (DOC) by infrared spectrometry method	SOP 55 (ČSN EN 1484)	Water ⁴ , purified water, aqueous extracts of waste
63	Determination of total organic carbon (TOC) by infrared spectrometry method	SOP 56 (ČSN EN 15936)	Waste, soils, sludge, sediments, fertilizers
64	Reserved		
65*	Determination of redox potential	SOP 58 (ČSN 75 7367)	Bathing water, ground water
66*	Preliminary determination of odour and taste	SOP 59 (ČSN EN 1622; ČSN 75 7340)	Drinking water, hot, produced, raw water, purified water
67	Determination of hexavalent chromium by photometry	SOP 60 (ČSN EN ISO 18412)	Water ⁴
68	Determination of total nitrogen (N) content by titration after distillation	SOP 61 (JPP ÚKZÚZ – Analysis of vegetable material)	Feedstuffs, vegetable material
69	Determination of total nitrogen (N) content by titration after distillation and calculation of C:N ratio from measured values	SOP 61 A (JPP ÚKZÚZ – Analysis of soils; ČSN 46 5735)	Soils, sludge, sediments, fertilizers, biodegradable waste, input and output from BPS
70	Determination of phosphorus (P) content by photometry	SOP 62 (JPP ÚKZÚZ – Analysis of vegetable material)	Feedstuffs, vegetable material
71	Determination of phosphorus (P) content by photometry and P ₂ O ₅ by calculation from measured values	SOP 62 A (JPP ÚKZÚZ – Analysis of soils)	Soils, sludge, sediments, fertilizers, biodegradable waste
72	Determination of organic acids by ITP method ³	SOP 63 (JPP ÚKZÚZ – Analysis of feedstuffs)	Feedstuffs, biodegradable waste, input and output from BPS



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
73	Determination of fibre content by gravimetry	SOP 64 (ČSN ISO 6541; ČSN ISO 16472; ČSN ISO 13906; JPP ÚKZÚZ – Analysis of feedstuffs)	Feedstuffs, biodegradable waste, input and output from BPS
74	Determination of N-NH ₄ ⁺ by photometry	SOP 65 (JPP ÚKZÚZ – Analysis of soils III)	Soils, sediments, fertilizers
75	Determination of N-NO ₃ ⁻ by potentiometry ISE and the sum of mineral nitrogen by calculation from measured values	SOP 65 A (JPP ÚKZÚZ – Analysis of soils III)	Soils, sludge, sediments, fertilizers, biodegradable waste
76	Determination of fat by gravimetry	SOP 66 (JPP ÚKZÚZ – Analysis of feedstuffs)	Feedstuffs, oily seeds, biodegradable waste
77	Determination of hydrocarbons C ₁₀ to C ₄₀ by gas chromatography (GC/FID)	SOP 67 (ČSN EN ISO 9377-2)	Water ⁴
78	Determination of hydrocarbons C ₁₀ to C ₄₀ by gas chromatography (GC/FID)	SOP 67 A (ČSN EN 14039; ČSN EN ISO 16703)	Waste, soils, sludge, sediments, fertilizers
79	Reserved		
80	Determination of N-NH ₄ ⁺ by titration	SOP 65 B (JPP ÚKZÚZ – Analysis of soils III)	Soils, sludge, sediments, fertilizers, biodegradable waste
81	Determination of ammonium, ammonia nitrogen and organic nitrogen by titration	SOP 09 A (FoodALYT manual)	Water ⁴ , purified water, boiler water, aqueous extracts of waste
82-99	Reserved		
100	Detection and enumeration of <i>Escherichia coli</i> and coliform bacteria by membrane filtration method	SOP 101 (ČSN EN ISO 9308-1; Regulation No. 423/2001 Coll.)	Water ⁵
101	Detection and enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by culture methods	SOP 102 (ČSN 75 7835)	Waste, ground water
102	Detection and enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by culture methods	SOP 102 A (ČSN 75 7835; AHEM 7/2004; AHEM 1/2008)	Waste, sludge, sediments, fertilizers, sand

**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

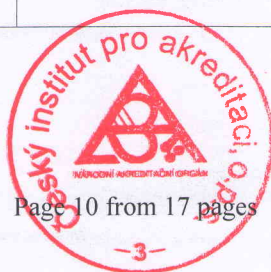
Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
103	Detection and enumeration of intestinal enterococci by membrane filtration method	SOP 103 (ČSN EN ISO 7899-2; Regulation No. 423/2001 Coll.)	Water ⁴
104	Detection and enumeration of intestinal enterococci by culture methods	SOP 103 A (ČSN EN ISO 7899-2; AHM 7/2001; AHM 1/2008)	Waste, sludge, sediments, fertilizers, sand
105	Detection and enumeration of mesophilic bacteria by culture methods	SOP 104 A (ČSN 75 7841)	Biodegradable waste
106	Enumeration of culturable microorganisms a) at 22 °C; b) at 36 °C by inoculation in a nutrient agar culture medium	SOP 105 (ČSN EN ISO 6222; Regulation No. 423/2001 Coll.)	Water ⁴
107	Detection and enumeration of <i>Clostridium perfringens</i> by membrane filtration method	SOP 106 (ČSN EN ISO 14189)	Water ⁴
108	Detection and enumeration of <i>Pseudomonas aeruginosa</i> by membrane filtration method	SOP 107 (ČSN EN ISO 16266)	Water ⁴
109	Enumeration of <i>Pseudomonas aeruginosa</i> by culture method	SOP 107 A (ČSN EN ISO 13720)	Foodstuffs
110	Enumeration of coagulase – positive staphylococci by membrane filtration method	SOP 108 (ČSN EN ISO 6888-1; ČSN EN ISO 6888-2)	Water ⁴
111	Enumeration of <i>Escherichia coli</i> by culture method	SOP 109 (ČSN ISO 16649-1; ČSN ISO 16649-2)	Foodstuffs
112	Determination of microbial contamination of feed and food industry facilities and medical facilities by culture methods	SOP 110 (ČSN 560100:1970; ČSN EN ISO 4833-1; ČSN EN ISO 6579-1; ČSN EN ISO 11290-1; ČSN EN ISO 21528-2; ČSN ISO 4832; ČSN EN ISO 7937; ČSN EN ISO 7932)	Areas a surfaces, epidermis
113	Determination of microbial contamination of surfaces by culture methods	SOP 110 A (Commission Regulation (EC) No. 1441/2007)	Smears of carcasses

The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
114	Enumeration of <i>Clostridium perfringens</i> by membrane filtration method	SOP 111 (ČSN EN ISO 7937; Annex No. 6 of Regulation No. 252/2004 Coll.; Regulation No. 423/2001 Coll.)	Water ⁴
115	Biological analysis – determination of microscopic image	SOP 112 (ČSN 75 7712; Regulation No. 423/2001 Coll.)	Water ⁴
116	Biological analysis – microscopic determination of abioseston	SOP 112 A (ČSN 75 7713; Regulation No. 423/2001 Coll.)	Water ⁴
117	Enumeration of total microorganisms by culture method	SOP 113 (Czech Pharmacopoeia 2017)	Purified water
118	Enumeration of total microorganisms by culture methods	SOP 114 (ČSN EN ISO 4833-1, ČSN EN ISO 4833-2; ČSN 56 0084)	Food, feedstuffs
119	Enumeration of coliforms by culture method	SOP 115 (ČSN ISO 4832)	Foodstuffs
120	Enumeration of yeasts and moulds by culture method	SOP 116 (ČSN ISO 21527-1; ČSN ISO 21527-2; AHEM 1/2003)	Food, feedstuffs, organic fertilizers
121	Detection and enumeration of <i>Salmonella</i> spp. by culture method	SOP 117 (ČSN EN ISO 6579-1)	Foodstuffs
122	Detection and enumeration of <i>Salmonella</i> spp. by culture method	SOP 117 A (ČSN EN ISO 6579-1; AHEM 7/2001; AHEM 1/2008)	Waste, sludge, sediments, fertilizers, sand
123	Detection and enumeration of <i>Salmonella</i> spp. by membrane filtration method	SOP 117 B (ČSN ISO 19250)	Water ⁴
124	Enumeration of <i>Bacillus cereus</i> by culture method	SOP 118 (ČSN EN ISO 7932)	Foodstuffs
125	Detection and enumeration of <i>Legionella</i> by membrane filtration method	SOP 119 (ČSN EN ISO 11731)	Water ⁴



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

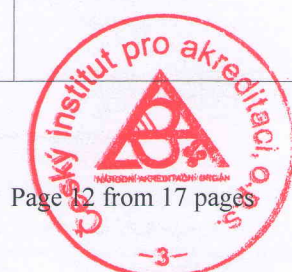
Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
126	Enumeration of <i>Clostridium Perfringens</i> by culture method	SOP 120 (ČSN EN ISO 7937; ČSN EN 26461-1; ČSN EN 26461-2)	Food, feedstuffs
127	Enumeration of <i>Clostridium Perfringens</i> by culture method	SOP 120 A (ČSN EN ISO 7937; ČSN EN 26461-1; ČSN EN 26461-2)	Waste, sludge, sediments, fertilizers
128	Testing of efficiency of sterilizers by biological and non-biological indicators	SOP 121 (ČSN EN 867-5; AHM 1/2014)	Biological and non-biological indicators
129	Detection and enumeration of <i>Listeria monocytogenes</i> by culture method	SOP 122 (ČSN EN ISO 11290-1; ČSN EN ISO 11290-2)	Foodstuffs
130	Detection and enumeration of <i>Listeria monocytogenes</i> by mini VIDAS	SOP 124 (mini VIDAS manual)	Foodstuffs, surfaces of food industry facilities
131	Enumeration of <i>Enterobacteriaceae</i> by culture method	SOP 125 (ČSN EN ISO 21528-2)	Foodstuffs
132	Detection and enumeration of <i>Enterobacteriaceae</i> by culture method	SOP 125 A (ČSN EN ISO 21528-2)	Waste, fertilizers
133	Detection and enumeration of <i>Salmonella spp.</i> by mini VIDAS	SOP 126 (mini VIDAS manual)	Food, feedstuffs, surfaces of food and feed industry facilities
134	Detection and enumeration of <i>Salmonella spp.</i> by mini VIDAS	SOP 126 A (mini VIDAS manual)	Waste, sludge, sediments, fertilizers, sand
135	Detection and enumeration of coliform bacteria and <i>Escherichia coli</i> by Colilert-18/Quanti-Tray method	SOP 127 (ČSN EN ISO 9308-2; manual to Quanti-Tray Sealer)	Water ⁴
136-199	Reserved		
200	Determination of the content of quaternary ammonium compounds by titration	SOP 200 (ČSN EN ISO 2871-2)	Impregnation
201	Chelatometric determination of copper content	SOP 201 (ČSN 49 0609)	Impregnation
202	Determination of boron content, H ₃ BO ₃ by potentiometric titration	SOP 202 (ČSN 49 0609)	Impregnation

**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
203	Determination of tebuconazole, propiconazole, flufenoxuron, fenoxycarb, cypermethrin and permethrin content by liquid chromatography method (HPLC/UV)	SOP 203 (ČSN EN 71-11)	Impregnation
204	Determination of 3-iodo-2-propenyl-N-butylcarbamate (IPBC) content by liquid chromatography method (HPLC/UV)	SOP 207 (ČSN EN 71-11)	Impregnation
205	Determination of bifenthrin by gas chromatography method (GC/ECD)	SOP 208 (ČSN EN 71-11)	Impregnation
206	Determination of copper by flame AAS method	SOP 210 (ČSN ISO 8288)	Impregnation
207-299	Reserved		
300	Determination of the inhibition of the mobility of <i>Daphnia magna</i> Straus – Acute toxicity test	SOP 300 (ČSN EN ISO 6341)	Water ⁶ , aqueous extracts of waste, chemical substances and mixtures
301	Freshwater green algal growth inhibition test	SOP 302 (ČSN EN ISO 8692)	Water ⁶ , aqueous extracts of waste, chemical substances and mixtures
302	Determination of the acute lethal toxicity of substances to a freshwater fish <i>Poecilia reticulata</i> Peters	SOP 303 (ČSN EN ISO 7346-2)	Water ⁶ , aqueous extracts of waste, chemical substances and mixtures
303	Determination of the acute lethal toxicity on the seeds of <i>Sinapis alba</i> , including the preparation of aqueous extract	SOP 304 (MP MŽP ČR No. 8 of April 2007)	Water ⁶ , aqueous extracts of waste, chemical substances and mixtures
304	Contact toxicity test – testing of effects on mortality and reproduction of Collembola <i>Folsomia candida</i> and <i>Folsomia fimetaria</i>	SOP 305 (ČSN EN ISO 11267; Regulation No. 257/2009 Coll.)	Waste, soils, sludge, sediments, fertilizers, chemical substances and mixtures
305	Contact toxicity test – testing of effects on mortality, reproduction and growth of Enchytraeidae <i>Enchytraeus albidus</i> and <i>Enchytraeus crypticus</i>	SOP 306 (ČSN EN ISO 16387; Regulation No. 257/2009 Coll.)	Waste, soils, sludge, sediments, fertilizers, chemical substances and mixtures



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
306	Determination of potential nitrification and inhibition of nitrification – rapid test by ammonium oxidation	SOP 307 (ČSN ISO 15685; Regulation No. 257/2009 Coll.)	Waste, soils, sludge, sediments, fertilizers, chemical substances and mixtures
307	Test of inhibition of growth of higher plants – on salad <i>Lactuca sativa</i>	SOP 301 (ČSN EN ISO 11269-1; Regulation No. 257/2009 Coll.)	Waste, soils, sludge, sediments, fertilizers, chemical substances and mixtures.
308	Enumeration of geohelminths (live-cycle stages)	SOP 308 (MP MZ 35023/2004 HEM; AHM 1/1986)	Sand
309	Determination of toxicity on <i>Vibrio fischeri</i> luminescent bacteria	SOP 309 (ČSN EN ISO 11348-1; ČSN EN ISO 11348-2)	Water ⁶ , aqueous extracts of waste, chemical substances and mixtures

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 at the test procedure/method name identifies the tests for which the range of determined analytes is specified at the end of this Appendix

⁴ drinking (including hot), raw and produced, surface, ground, waste, bottled, mineral and bathing water.

⁵ drinking (including hot), raw and produced, surface, bottled, mineral and bathing water.

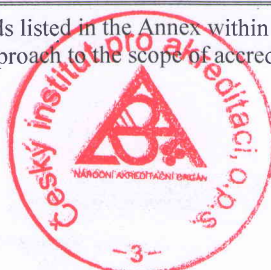
⁶ surface, ground, waste water.

Annex:

Flexible scope of accreditation

Ordinal numbers of tests
2, 3, 4, 14, 15, 16, 17, 25, 26, 27, 44, 45, 48, 49, 50, 51, 52, 72

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Sampling:

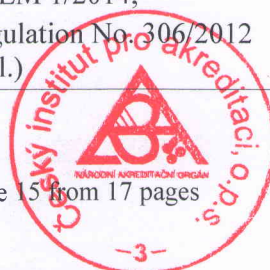
Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
1	Drinking water sampling	IP 01 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-5; ČSN EN ISO 5667-14; ČSN EN ISO 11731; ČSN EN ISO 19458; Regulation No. 252/2004 Coll.)	Drinking, raw, treated water, hot water
2	Purified water sampling	IP 01 A (ČL 2017; ČSN 68 4063; ČSN EN ISO 19458; ČSN EN ISO 5667-1; ČSN EN ISO 5667-14)	Purified water
3	Waste water sampling (manually and by automatic sampler)	IP 02 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN EN ISO 5667-14)	Waste water
4	Surface water sampling	IP 02 A (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 5667-14; ČSN EN ISO 19458)	Surface water
5	Ground water sampling (using pump)	IP 03 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 5667-14)	Ground water
6	Sampling of water from artificial bathing places	IP 04 (ČSN EN ISO 5667-1; ČSN EN ISO 19458; ČSN EN ISO 5667-3; ČSN EN ISO 5667-14; ČSN EN ISO 11731; Regulation No. 238/2011 Coll.)	Bathing water

**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
7	Waste sampling	IP 05 (ČSN EN 14899; MP MŽP ČR No. 6 from 2008; ČSN EN ISO 5667-1; ČSN EN ISO 5667-13; ČSN EN ISO 5667-15; ČSN EN 16179; ČSN 46 5735)	Waste, sludge, input and output from BPS, insulating liquids, composts
8	Agricultural soil sampling	IP 06 (Working procedure for AZZP in CR in season 2017 to 2022; Regulation No. 275/1998 Coll.; Regulation No. 335/2017 Coll.)	Soils
9	Sand box sampling	IP 07 (Regulation No. 238/2011 Coll.; MP MZ 35023/2004 HEM; AHM 1/1986)	Sand
10	Agricultural products sampling for the determination of chemical parameters	IP 08 (ČSN 56 0253)	Agricultural products, fruit and vegetables
11	Sampling from carcasses for the determination of microbiological parameters	IP 09 A (ČSN EN ISO 17604; Methodical instructions SVS CR No. 2/2006; Commission Regulation (EC) No. 1441/2007)	Carcasses
12	Sampling of smears and imprints for the determination of microbial contamination of feed and food industry facilities and medical facilities	IP 09 B (ČSN EN ISO 18593; ČSN 56 0100:1970)	Areas a surfaces, epidermis
13	Sampling of biological and non-biological indicators for checks of efficiency of sterilizers	IP 10 (ČSN EN 867-5; AHM 1/2014; Regulation No. 306/2012 Coll.)	Biological and non-biological indicators



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
14	Sampling of sediments	IP 12 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-15; ČSN ISO 5667-12; ČSN EN 14899; Regulation No. 257/2009 Coll.; MP MŽP CR No. 6 to waste sampling – Bulletin MŽP CR No. 4/2008)	Sediments

¹ 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)

List of analytes

Test ord. number	List of analytes
14; 15	Naphthalene, acenaphthene, acenaftylene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, indeno(1,2,3-c,d)pyrene, sum of PAH
16; 17	Congeners – K 28, K 52, K 101, K 118, K 138, K 153, K 180; sum of PCB congeners Hexachlorobenzene, alpha HCH, beta HCH, delta HCH, gamma HCH, heptachlor, p,p'-DDE, p,p'-DDD, p,p'-DDT, o,p'-DDE, o,p'-DDD, o,p'-DDT, 4,4'-methoxychlor, aldrin, endrin, dieldrin, trifluralin, alpha endosulfan, beta endosulfan, cis-heptachlorepoxyde, trans-heptachlorepoxyde, sum of pesticides
44; 45	Benzene, toluene, ethylbenzene, o-xylene, sum of m-xylene + p-xylene, sum of xylenes, styrene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichloromethane, tetrachloromethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, 1,2-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene (TCE), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethene (PCE), chloroform, bromodichloromethane, dibromochloromethane, bromoform. sum of THM; sum of BTEX; sum of TOL
72	Acetic acid, lactic acid, butyric acid, propionic acid



**The Appendix is an integral part of
Certificate of Accreditation No.: 347/2022 of 11/07/2022**

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

Laboratoř M O R A V A s.r.o.
Oderská 456, Butovice, 742 13 Studénka

Explanations:

ABBREVIATIONS

SOP	– Standard Operating Procedure developed according to valid standards and regulations
TNV	– Branch Technical Standard of Water Management
IP	– Internal Procedure (sampling procedure identification)
ÚKZÚZ	– Central Institute for Supervising and Testing in Agriculture
AHEM	– Acta Hygienica, Epidemiologica et Microbiologica
ISE	– Ion Selective Electrode
ITP	– Isotachophoresis
AAS	– Atomic Absorption Spectrometry
JPP	– Uniform Working Procedures
DIS	– Dissolved Inorganic Salts
FLD	– Fluorescence Detector
ECD	– Electron Capture Detector
FID	– Flame Ionization Detector
UV	– UV Radiation Detector
GC	– Gas Chromatography
HPLC	– High-Performance Liquid Chromatography
DIN	– Deutscher Institut für Normung
BPS	– Biogas Plants
AZZP	– Agrochemical testing of agricultural soils
ČL	– Czech Pharmacopoeia
MP	– Methodical Guideline
MŽP	– Ministry of the Environment
MZ	– Ministry of Health
EC	– European Community
SVS	– State Veterinary Administration

TESTED OBJECT

Purified water Aqua purificata, water for dilution of concentrated hemodialysing solutions, water for sterilizers, distilled and demineralized water.

Aqueous extract of waste
extract prepared according to valid legislation – Waste Act No. 541/2020 Coll. as amended by subsequent regulations.

Fertilizers composts, organic, organo-mineral, mineral, lime fertilizers and soil improvers.

Waste solid and liquid waste, biodegradable waste, products from waste (shortly products), recyclates.

Impregnation agents
agents for the protection of wood (impregnation solutions) and impregnated wood after extraction and it's aqueous extracts.

