Hellenic Accreditation System

Annex F1/5 to the Certificate No. **1217-**2

SCOPE of ACCREDITATION

of

Thessaloniki Water Treatment Plant Laboratory

of

Water Facilities Direction

of

Thessaloniki Water Supply & Sewerage Company S.A. (EYATH AE)

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Physicochemical Tests		
Drinking water	Determination of free chlorine	M-04, In house method based on DPD, 8021 HACH
Surface and drinking water	Determination of pH	M-01, In house method based on ELOT 658:1983
	Determination of conductivity	M-02, In house method based on APHA 2510
	Determination of turbidity	M-03, In house method based on APHA 2130B
	Determination of Total Organic Carbon (TOC)	M-20, In house method based on APHA5310
Drinking and surface water	Determination of Chloride Ions	M-05, In-house method based on APHA 4500-Cl– B
Drinking, ground and surface water	Determination of Ammonium Ions	M-06, Colorimetric, 114752 Spectroquant Merck

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Drinking and ground water	Determination of Nitrite Ions	M-07, In-house method based on APHA 4500-NO_2^- B*
Drinking and ground water	Determination of Nitrate Ions	M-08, In-house method based on APHA 4500-NO_3^- B*, screening
Drinking water	Determination of Color	M-10, Color HAZEN (Platin-Cobalt) Method number 180 Spectroquant Merck
Drinking water	Determination of Aluminum	M-14, Method HACH LCK 301
Surface and drinking water	Determination of Volatile Organic Compounds (VOCs): 1. Methyloisoborneol (MIB), 2. Geosmin, 3. cis-1,2dichloroethene (cis-DCE), 4. trans-1,2-dichloroethene (trans-DCE), 5. Chloroform, 6. 1,2-dichloroethane, 7. Benzene, 8. Trichloroethene, 9. Bromodichloromethane, 10. Toluene, 11. Tetrachloroethene, 12. Dibromochloromethane, 13. Chlorobenzene 14. Ethylbenzene, 15. Styrene, 16. Bromoform, 17. 1,2-Dichlorobenzene	M-21, In-house method HS-SPME-GC/MS based on ELOT EN ISO 17943_2016 (HS-SPME-GC/MS)

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Surface and drinking water	Determination of pesticides: 1. 2,4-D (2,4-PA), 2. Acetochlor, 3. Acibenzolar-S-methyl, 4. Aldicarb-Sulfone (Aldoxycarb), 5. Ametryn, 6. Amitraz, 7. Atrazine, 8. Azaconazole, 9. Azimsulfuron, 10. Azinphos methyl, 11. Azoxystrobin, 12.Benalaxyl, 13. Bentazone, 14. Benzoximate, 15. Bispyribac-sodium, 16. Boscalid, 17. Bromacil, 18. Bromoxynil, 19. Bromuconazole 1, 21. Bupirimate, 22.Buprofezin, 23.Butafenacil, 24.Cadusafos, 25.Carbaryl, 26. Carbofuran, 27. Carboxin, 28. Carpropamid, 29. Chlorantraniliprole, 30. Chlorbromuron, 31. Chloridazon, 32. Chloroxuron, 33. Chlorpyrifos, 34. Chlorsulfuron, 35. Clethodim, 36. Climbazole, 37. Clodinafop-propargyl, 38. Clomazone, 39. Coumaphos, 40. Crimidine, 41. Cyanazine, 42. Cyazofamid, 43. Cycloxydim, 44. Cyproconazole, 45. Cyprodinil, 46. Demeton-S, 47. Desmedipham, 48. Desmetryn, 49. Diazinon, 50. Dichlofluanid 51.Dichlorprop, 52.Diclobutrazol (stereo isomer), 53.Diethofencarb, 54.Difenoconazole, 55. Diflubenzuron, 56. Dimethenamid, 57. Dimethoate, 58. Dimethomorph, 59. Diphenamid, 60. Dipropetryn, 61. Diuron, 62. EPN, 63. Epoxiconazole, 64. Etaconazole, 65. Ethiofencarb, 66. Ethoprophos, 67.Famphur, 68.Fenarimol, 69. Fenbuconazole, 70. Fenhexamid, 71. Fenoxycarb, 72. Fensulfothion, 73. Fipronil, 74. Fipronil-desulfinyl, 75. Florasulam 76. Fluazifop, 77. Fludioxonil, 78. Flufenacet, 79. Flufenoxuron, 80. Fluometuron, 81. Fluopyram, 82. Fluquinconazole, 83. Fluroxypyr, 84. Flusilazole, 85. Flutolanil, 86. Flutriafol, 87. Foramsulfuron, 88. Forchlorfenuron, 89. Formetanatehydrochloride, 90. Furalaxyl, 91. Halosulfuron-methyl, 93. Hexazinone, 94. Hexythiazox, 95. Imidacloprid, 96. Iodosulfuron-methyl, 97. Ioxynil, 98.Iprovalicarb, 99. Isoprothiolane, 100. Isoproturon, 102. Malathion, 103. MCPA, 104. Mefenpyr-diethyl, 105. Mepronil, 106. Mesosulfuron methyl, 107. Metalaxyl-M (Mefenoxam)	M-22, In-house method Direct Injection-LC-MS/MS based on Shimadzu application news No SCA_210_043

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Surface and drinking water (continued)	108. Metazachlor, 109. Methabenzthiazuron, 110. Methiocarb, 111. Methomyl, 112. Methoprotryne, 113. Methoxyfenozide, 114. Metobromuron, 115. Metolachlor, 116. Metoxuron, 117. Metribuzin, 118. Metsulfuron-methyl, 119. Mevinphos, 120. Monocrotophos, 121. Myclobutanil, 122. Naled, 123. Napropamide, 124. Nicosulfuron, 125. Norflurazon, 126. Nuarimol, 127. Oxadixyl, 128. Oxamyl 129. Paclobutrazol, 130. Penconazole, 131. Pencycuron, 132. Pendimethalin, 133. Penoxsulam, 134. Phenmedipham, 135. Phorate, 136. Pinoxaden, 137. Pirimicarb, 138. Prochloraz, 139. Profoxydim, 140. Promecarb, 141. Prometryn, 142. Propanil (DCPA), 143. Propaquizafop, 144. Propazine, 145. Propiconazole, 146. Propyzamide, 147. Proquinazid, 148. Prothiophos, 149. Pymetrozine, 150. Pyraclostrobin, 151. Pyrimethanil, 152. Pyriproxyfen, 153. Pyroxsulam, 154. Quinoxyfen, 155. Simazine, 156. Sulfotep, 157. Sulprofos, 158. Tebuconazole, 159. Tebufenozide, 160. Tembotrione, 161. TEPP (Tetraethylpyrophosphate), 162. Terbumeton, 163. Terbutryn, 164. Tetrachlorvinphos (CVMP), 165. Tetraconazole, 166. Thiacloprid, 167. Thiencarbazone-methyl, 168. Thifensulfuron-methyl, 169. Thiobencarb, 170. Thiophanate-methyl, 171. Tolylfluanid, 172. Triadimefon, 173. Tribenuron-methyl, 174. Triclopyr, 175. Tricyclazole, 176. Trifloxystrobin, 177. Triflumizole, 178. Triflumuron, 179. Triticonazole, 180. Tritosulfuron, 181. Uniconazole P	M-22, In-house method Direct Injection-LC-MS/MS based on Shimadzu application news No SCA_210_043
Surface and drinking water	Determination of : 1. 2-Phenylphenol, 2. Acenaphthene, 3. Acibenzolar-S-methyl, 4. Aclonifen, 5. Acrinathrin – Cyhalothrin, 6. Aldrin, 7. Azinphos-ethyl, 8. Benfluralin 9. Benthiavalicarb-isopropyl, 10. Benz[a]anthracene, 11. Benzo[a]pyrene, 12. Benzo[b]fluoranthene, 13. Benzo[g,h,i]perylene, 14. Benzo[k]fluoranthene, 15. BHC-alpha (benzene hexachloride),	M-23, In-house method SPE-GC-MS/MS based on EPA 525.2 «Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography /Mass Spectrometry»
Surface and drinking water (continued)	16. BHC-beta, 17. BHC-delta, 18. BHC-gamma (Lindane,gamma HCH), 19. Bifenox, 20. Biphenyl, 21. Boscalid, 22. Bromacil, 23. Bromocyclen, 24. Bromophos-ethyl, 25. Bupirimate, 26. Buprofezin, 27. Butafenacil,	M-23, In-house method SPE-GC-MS/MS based on EPA 525.2 «Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
	28. Cadusafos, 29. Carbophenothion, 30. Chlordane-cis, 31. Chlordane-trans, 32. Chlorfenapyr, 33. Chlorfenson, 34. Chlorfenvinphos, 35. Chlorobenzilate, 36. Chloroneb, 37. Chlorpropham, 38. Chlorpyrifos, 39. Chlorpyrifos-methyl, 40. Chlorthion, 41. Chrysene, 42. Clomazone, 43. Cloquintocet-mexyl, 44. Coumaphos, 45. Cyanophos, 46. Cyhalothrin (Lambda), 47. Cypermethrin, 48. Cyproconazole, 49. DCPA (Dacthal,Chlorthal-dimethyl), 50. DDD-o,p', 51. DDD-p,p', 52. DDE-o,p', 53. DDE-p,p', 54. DDT-o,p', 55. DDT-p,p', 56.Diazinon, 57.Dichlofenthion,58.Dichloran, 59. Dichlorobenzonitrile,2,6-(Dichlobenil), 60. Dichlorvos, 61. Diclofop-methyl, 62. Dicofol, o, p', 63. Dicofol, p, p', 64. Dieldrin, 65. Dimethoate, 66. Dimethomorph I & II, 67. Diniconazole, 68. Diphenamid, 69. Ditalimfos, 70. Endosulfan I (alpha isomer), 71. Endosulfan II (beta isomer), 72. Endosulfan sulfate, 73. Endrin, 74. EPN, 75. EPTC, 76. Ethalfluralin, 77. Ethion, 78. Ethofenprox, 79. Ethofumesate, 80. Ethoprophos, 81. Etridiazole, 82.Fenarimol, 83. Fenazaquin, 84. Fenitrothion, 85. Fenpropathrin, 86. Fenpropimorph, 87. Fenson, 88. Fensulfothion, 89. Fenthion 90. Fenvalerate, 91. Fipronil, 92. Fluchloralin, 93. Flucythrinate I & II, 94. Flufenacet, 95. Fluoranthene, 96. Fluorene, 97. Fluvalinate, 98.Fonofos, 99. Fosthiazate I & II, 100. Heptachlor, 101.Heptachlor endo-epoxide, 102. Heptachlor exo-epoxide, 103.Heptenophos, 104.Indeno[1,2,3-cd]pyrene, 105. Indoxacarb, 106. Iodofenphos, 107. Iprobenfos, 108. Iprodione, 109.Isazofos,110. Isocarbophos, 111. Isodrin, 112. Isofenphos, 113. Isofenphos-methyl, 114. Isoprothiolane, 115. Leptophos, 116. Malathion, 117. Mecarbam, 118. Mefenpyr-diethyl, 119. Mepanipyrim, 120. Mepronil, 121. Methacrifos,	Capillary Column Gas Chromatography /Mass Spectrometry»

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Surface and drinking water (continued)	122. Methidathion, 123. Methylnaphthalene-1, 124. Methylnaphthalene-2, 125. Metolachlor, 126. Mirex, 127. Naphthalene, 128. Nitrapyrin, 129. Nitrofen, 130. Nitrothal-isopropyl, 131. Nuarimol, 132. Octachlorodipropyl ether (S 421), 133. Ofurace, 134. Oxadiazon, 135. Oxyfluorfen, 136. Parathion, 137. Pendimethalin, 138. Pentachloroanisole, 139. Pentachloronitrobenzene (Quintozene), 140. Permethrin, (1R)-cis, 141. Permethrin (1R)-trans, 142. Phenanthrene, 143. Phenthoate, 144. Phosalone, 145. Phosmet, 146. Phosphamidon I, 147. Phosphamidon II, 148. Piperonyl butoxide, 149. Pirimiphos-ethyl, 150. Pirimiphos-methyl, 151. Procymidone, 152.Profenofos, 153.Promecarb, 154. Propanil, 155. Propargite, 156. Propetamphos, 157. Propham, 158. Propyzamide, 159.Prothiofos, 160. Pyrazophos, 161. Pyrene, 162. Pyridaben, 163. Pyridaphenthion, 164. Pyrimethanil, 165. Pyriproxyfen, 166. Quinalphos, 167.Quizalofop-ethyl, 168. Spiromesifen, 169. Sulfotep, 170. Tebufenpyrad, 171. Tecnazene, 172. Tefluthrin, 173. Terbufos, 174. Tetrasul, 175. Tolclofos-methyl, 176.Transfluthrin, 177. Triadimefon, 178. Triazophos, 179. Trichloronat, 180. Tricyclazole, 181.Vinclozolin	M-23, In-house method SPE-GC-MS/MS based on EPA 525.2 «Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography /Mass Spectrometry»
Drinking, surface and ground water	Determination of Fluorides, Chlorites, Chlorides, Nitrites, Bromides, Chlorates, Nitrates, Orthophosphates, Sulphates	M-24, In-house method of Ion Chromatography based on ISO 10304-1:2007 & EPA Method 300.1
Drinking, surface and ground water	Determination of Sodium, Ammonium	M-25, In-house method of Ion Chromatography based on ISO 14911:1998
Drinking, surface and ground water	Determination of Bromate	M-26, In-house method of Ion Chromatography on ISO 11206:2011 & MetrOhm IC Application Note U-51
Drinking, surface and ground water	Determination of Free Cyanides	M-27, In-house method of Ion Chromatography based on MetrOhm IC Application Note P-52

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
Surface and drinking water	Determination of : 1.Perfluorobutanoic acid (PFBA), 2. Perfluorobutanesulfonic acid (PFBS), 3. Perfluoropentanoic acid (PFPeA), 4. Perfluoropentanesulfonic acid (PFPeS), 5. Perfluorohexanoic acid (PFHxA), 6. Perfluorohexanesulfonic acid (PFHxS), 7. Perfluoroheptanoic acid (PFHpA), 8. Perfluoroheptanesulfonic acid (PFHpS), 9. Perfluorooctanoic acid (PFOA), 10. Perfluorooctanoicsulfonic acid (PFOS), 11. Perfluorononanoic acid (PFNA), 12. Perfluorononanesulfonic acid (PFNS), 13. Perfluorodecanoic acid (PFDA), 14. Perfluorodecanesulfonic acid (PFDS), 15. Perfluoroundecanoic acid (PFUdA), 16. Perfluoroundecanesulfonic acid (PFUdS), 17. Perfluorododecanoic acid (PFDoA), 18. Perfluorododecanesulfonic acid (PFDoS), 19. Perfluorotridecanoic acid (PFTrDA), 20. Perfluorotridecanesulfonic acid (PFTrDS).	M-28, In-house method SPE - LC-MS/MS based on ISO 21675:2019 and EPA 537.1 methods
Surface and drinking water	Determination of: Bisphenol F, Estriol, Bisphenol A, Estrone, 17β-estradiol, n-octylphenol, tert-octylphenol, nonylphenol	M-29, In-house method, SPE - LC-MS/MS based on Microchemical Journal, Vol. 96 (2010), pp. 92-98
Surface and drinking water	Determination of microcystins: Microcystin – LR Microcystin – RR Microcystin – YR Microcystin - LA	M-30, In-house method, SPE - LC-MS/MS based on ISO 22104:2021
Drinking water	Determination of Haloacetic Acids: Monochloroacetic acid (MCAA) Dichloroacetic acid (DCAA) Trichloroacetic acid (TCAA) Monobromoacetic acid (MBAA) Dibromoacetic acid (DBAA) Bromochloroacetic acid (BCAA) Bromodichloroacetic acid (BDCAA) Dibromochloroacetic acid (DBCAA)	M-31, In-house method, SPE - LC-MS/MS based on J Chromatogr A. 2001, 938, 45-55
Surface and drinking water	Determination of selected elements: Boron, Sodium, Magnesium, Aluminum, Potassium, Calcium, Chromium, Manganese, Iron, Nickel, Copper, Arsenic, Selenium, Cadmium, Antimony, Mercury, Lead	M-32, In-house method, ICP-MS based on EN ISO 17294-2 : 2023
Microbiological Tests		
Drinking Water	Enumeration of Total Coliforms and *Escherichia coli*	M-40, ISO 9308-1:2014 /Amd.1:2016
	Detection and enumeration of intestinal enterococci	M-41, ISO 7899-2:2000
	Enumeration of culturable microorganisms at 22±2ºC and 36±2ºC	M-42, ISO 6222:1999

Materials/Tested products	Type of test/Measured properties	Applied standards/ Techniques used
	Enumeration of *Clostridium perfringens*	M-43, ISO 14189:2013
Sensory Tests		
Drinking Water	Taste and odor – Qualitative simplified procedure	M-50, In-house method based on EN 1622:2006 - ANNEX C

* American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 24th Edition, 2023.

Site of assessment: **Permanent laboratory premises**, **N. Ionia Thessaloniki**
Approved Signatory: **Alexiadou Despoina, Gkementzoglou Chrysoula, Kontopoulou Maria, Xanthopoulou Nikoletta, Seretoudi Georgia, Tsirtou Marianthi.**

This Scope of Accreditation replaces the previous one dated 15.07.2024.
The Accreditation Certificate No. **1217**-2, to ELOT EN ISO/IEC 17025: 2017, is valid until 29.07.2029.

Athens, 01.04.2026

Konstantinou Evangelos Apostolos
CEO of ESYD