Hellenic Accreditation System

Annex F1/22 to the Certificate No. **16**-7

SCOPE of ACCREDITATION

of the
Testing Laboratory

"A. TSAKALIDIS Inc."

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
Chemical Tests		
1. Water and wastewater[$]	1.Anions/ Cations/ Physicochemical Parameters [$$] (pH, Conductivity, Turbidity etc.) [$$] Detailed list of accredited activities in flexible scope	*Modified methods [$$$]based on: APHA-STD METHODS, ISO, HACH LCK, MACHEREY NAGEL, EPA, Spectrophotometry, Titration, pH-metry, Turbidimetry, Conductometry, Gravimetric Methods, Ion Chromatography*
	2. Determination of metals[$$] (Al*, As*, Ba, Be, Ca, Cd*, Co, Cr*, Cu*, Fe*, K, Mg, Mn*, Mo, Na*, Ni*, P, Pb*, Sb*, Se*, Sn, Sr, Ti, Tl, V, Zn, B*, U*, Hg*, Li etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house method O.520[$$$] based on EPA Method 6020B, ISO 17294-1 & ISO 17294-2 / ICP-MS*
	3. Contaminants $$ (PAH, epichlorohydrin, trihalomethanes etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house methods[$$$] LC/MS/MS, GC-MS, GC-MS/HS, SPE, Direct Injection*
	4. Determination of Oil & Grease	*In-house method O.148 based on EPA 1664*
2. Water and wastewater	1. Determination of Calcium	*APHA 3111 B*
	2. Determination of Potassium	*APHA 3500-K B*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
	3. Determination of Magnesium	*APHA 3111 B*
	4. Determination of Sodium (*)	*In-house method O.504 based on APHA 3500-Na B*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
3. Waters of Low and High Conductivity	1. Determination of 208 Pesticide Residues 1,2,3,6-Tetrahydrophthalimide / THPI, 2,3,4,5,6-Pentachloroaniline, 2,3,4,5,6-Pentachloroanisole, 2,3,5,6-Tetrachloroaniline, 2,4'-Methoxychlor, 2,6-Dichlorobenzonitrile/ Dichlobenil, 3,4-Dichloroaniline, 4,4'-Dichlorobenzophenone, 4,4'-Methoxychlor olefin, Acetochlor , Acrinathrin, Alachlor, Aldrin, Allidochlor, Alpha-Lindane, Anthraquinone , Atrazine, Azinphos-ethyl, Azinphos-methyl, Benfluralin, Bifenthrin , Bioallethrin, Biphenyl , Botran, Bromfenvinfos-methyl, Bromfenvinphos, Bromophos , Bromophos-ethyl, Bromopropylate, Bupirimate, Captafol, Captan, Carbophenothion, Carfentrazone-ethyl, Chlorbenside, Chlorfenapyr, Chlorobenzilate, Chloroneb, Chloropyriphos-methyl, Chlorothalonil, Chlorpropham, Chlorpyrifos, Chlorthiophos(isomers I, II & II), Chlozolinate, cis- Chlordane, cis-Diallate I, cis-Nonachlor, cis-Permethrin, cis-Phenothrin, Clofenvinfos, Coumaphos, Cycloate, Cyfluthrin , Cypermethrin , Cyprodinil, DCPA, DDD, o,p'-/2,4', DDD, p,p'-/4,4', DDT o,p'/2,4', DDE, o,p'-/2,4' , DDE, p,p'-/4,4' , DDT, p,p'-, Deltamethrin, Diazinone, Dichlofluanid, Dieldrin, Dimethachlor, Dimethazone, Diphenamid, Diphenylamine, Edifenphos, Endosulfan ether, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, EPN, Ethalfluralin, Ethion, Ethylan, Etofenprox, Etridiazole, Fenamiphos, Fenarimol, Fenitrothion, Fenpropathrin, Fenson, Fenthion, Fenvalerate I, Fenvalerate II, Fipronil, Fluazifop-p-butyl, Fluchloralin, Flucythrinate I, Flucythrinate II, Fludioxonil, Fluquinconazole, Fluridone, Flusilazole, Flutolanil, Flutriafol, Folpet, Fonofos, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexazinone, Iodofenphos, Iprodione, Isazophos, Isodrin, Isopropalin , Lambda-Cyhalothrin, Lenacil, Leptophos, Linuron, Malathion, Metalaxyl, Metazachlor, Methacrifos, Methoxychlor , Methyl parathion, Metolachlor, Mevinphos, MGK-264, Mirex, Myclobutanil, N-(2,4-Dimethylphenyl) formamide, Nitralin, Nitrofen, Norflurazon, o-Hydroxybiphenyl, Ovex, Oxadiazon, Oxyfluorfen, Paclobutrazol, Parathion, Pebulate, Penconazole, Pendimethalin, Pentachlorobenzene, Pentachloronitrobenzene , Pentachlorobenzonitrile, Pentachlorothioanisole, Phorate, Phosalone, Phosmet, Piperonyl butoxide, Pirimiphos-ethyl, Pirimiphos-methyl, Pretilachlor, Prochloraz, Procymidone, Prodiamine, Profenofos, Profluralin, Propachlor, Propanil, Propargite, Propisochlor, Propyzamide, Prothiofos, Pyraclofos, Pyrazophos, Pyridaben, Pyridaphenthion, Pyrimethanil, Pyriproxyfen, Quinalphos, Resmethrin, Ronnel, Sulfotep, Sulprofos, tau-Fluvalinate I, tau-Fluvalinate II, Tebuconazole, Tebufenpyrad, Tecnazene / Tetrachloronitrobenzene, Tefluthrine, Terbacil, Terbufos, Terbuthylazine, Tetrachlorvinphos, Tetradifon, Tetramethrin, Tolclofos-methyl, Tolylfluanid, trans-Chlordane, trans-Diallate II, trans-Fluthrin, trans-Nonachlor, trans-Permethrin, trans-Phenothrin, Triadimefon, Triadimenol, Triallate, Triazophos, Tricyclazole, Triflumizole, Trifluralin,Vinclozoline, β-BHC, γ-BHC (lindane), δ-BHC	*In-house method O.664 based on EPA 525.3* *(GC/MS)*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
3. Waters of Low and High Conductivity (continued)	2. Determination of 120 Pesticide Residues Acetamiprid, Acetochlor, Alachlor, Aldicarb sulfone, Atrazine, Azoxystrobin, Benalaxyl, Bendiocarb, Bitertanol, Boscalid, Bromuconazole, Bupirimate, Butafenacil, Butoxycarboxim, Carbetamide, Carbofuran, Carbofuran-3-hydroxy, Carfentrazone-ethyl, Chlorantraniliprole, Chlorfenvinphos, Chloroxuron, Chlorpropham, Chlorthiophos, Chlortoluron, Clomazone, Clothianidin, Cyazofamid, Cycluron, Cymoxanil, Cyproconazole, Diclobutrazol, Dicrotophos, Difenoconazole, Dimethachlor, Dimethomorph, Diniconazole, Dioxacarb, Diphenamid, Diuron, Epoxiconazole, Etaconazole, Ethofumesate, Famoxadone, Fenarimol, Fenbuconazole, Fenobucarb, Fenoxycarb, Fenpropimorph, Fenuron, Flonicamid, Flubendiamide, Flufenacet, Fluometuron, Fluoxastrobin, Fluquinconazole, Fluridon, Flusilazole, Flutriafol, Forchlorfenuron, Fuberidazole, Furalaxyl, Hexaconazole, Hexazinone, Imidacloprid, Indoxacarb, Iprovalicarb, Isoprocarb, Isoproturon, Linuron, Mandipropamid, Mefenacet, Metalaxyl, Metazachlor, Metconazole, Methabenzthiazuron, Methoxyfenozide, Metobromuron, Metolachlor, Mevinphos, Monocrotophos, Monolinuron, Myclobutanil, Neburon, Norflurazon, Nuarimol, Oxadixyl, Paclobutrazol, Penconazole, Picoxystrobin, Prochloraz, Promecarb, Prometon, Propachlor, Propanil, Propiconazole, Propoxur, Propyzamide, Prothioconazole, Pymetrozine, Secbumeton, Siduron, Spirotetramat, Sulfentrazone, Tebuconazole, Tebuthiuron, Terbumeton, Terbuthylazine, Tetrachlorvinphos, Tetraconazole, Tetradifon, Thiabendazole, Thiamethoxam, Thidiazuron, Triadimefon, Triadimenol, Trichlorfon, Tricyclazole, Triflumizole, Triticonazole, Zoxamide	*In-house method O.661 based on Molecules (2022) 27, no. 6: 1872 (UPLC/MS/MS*)
	3. Determination of Bisphenol A	*In-house method O.660 based on DIN EN ISO 18857-2 (LC/MS/MS)*
4. Products of animal and vegetable origin	Determination of Nitrogen	*ISO 1871:2009*
5. Foodstuffs and drinks ESYD G-METALS/01/01/20-10-2016	1. Determination of Moisture and Dry total matter	*Greek Food Code, VolumeII, Part B, Γ1*
	2. Determination of Ash	*Greek Food Code, VolumeII, Part B, Γ2*
	3. Determination of Fat	*In-house method O.140 based on Weibull-Stoldt*
	4. Determination of Sodium	*In-house method O.514*
	5. Determination of metals[$$] (As, Ca, Cd**, Cr, Cu, Fe, Hg**, K, Mg, Mn, Na, P, Pb**, Se, Sn**, Zn etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house method O.521[$$$] based on AOAC 2015.01 / ICP-MS*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
6. Foodstuffs and drinks[$] ESYD G-METALS/01/01/20-10-2016	Determination of TOXINS, CONTAMINANTS, PRESERVATIVES, ADDITIVES, NUTRIENT INGREDIENTS [$$] (Aflatoxins, Ochratoxin A, Sorbic Acid, Benzoic Acid, Sugars, Fat Composition, Acrylamide etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house methods* [$$$] *HPLC, GC/FID, LC/MS/MS* *EXTRACTION, SPE*
7. Cereals and their products	Determination of Mycotoxins: Aflatoxins B1, B2, G1, G2, Ochratoxin A (OTA), Zearalenone (ZON), Deoxynivalenol (DON), Fumonisins B1, B2, Toxins T-2, HT-2	*In-house method O.663* *(UPLC/MS/MS)*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
8. Cereals and legumes	Determination of 195 Pesticide Residues Acetamiprid, Acetochlor, Acibenzolar-S-methyl, Alachlor, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Ametryn, Aminocarb, Atrazine, Azoxystrobin, Benalaxyl, Bendiocarb, Benzoximate, Bitertanol, Bromuconazole, Bupirimate, Buprofezin, Butafenacil, Butocarboxim, Butoxycarboxim, Carbaryl, Carbendazim, Carbetamide, Carbofuran, Carbofuran-3-hydroxy, Carboxin, Chlorantraniliprole, Chlorfenvinphos, Chlorfluazuron, Chloroxuron, Chlorpropham, Chlorthiophos, Chlortoluron, Clethodim, Clomazone, Clothianidin, Cycluron, Cymoxanil, Cyproconazole, Cyprodinil, Desmedipham, Diazinon, Diclobutrazol, Dicrotophos, Diethofencarb, Dimethachlor, Dimethoate, Dimethomorph (sum of isomers), Dimoxystrobin, Diniconazole, Dinotefuran, Diphenamid, Diuron, Doramectin, Emamectin benzoate, Epoxiconazole, Eprinomectin, Etaconazole, Ethiofencarb, Ethirimol, Ethofumesate, Etoxazole, Fenamidone, Fenamiphos, Fenarimol, Fenazaquin, Fenbuconazole, Fenhexamid, Fenobucarb, Fenoxycarb, Fenpropimorph, Fenpyroximate, Fenuron, Flonicamid, Fluazinam, Flufenacet, Flufenoxuron, Fluomethuron, Fluoxastrobin, Fluquinconazole, Fluridon, Flusilazole, Flutolanil, Flutriafol, Forchlorfenuron, Formetanate, Fuberidazole, Furalaxyl, Furathiocarb, Hexaconazole, Hexazinone, Hexythiazox, Hydramethylnon, Imazalil, Imidacloprid, Indoxacarb, Ipconazole, Iprovalicarb, Isazophos, Isoprocarb, Isoproturon, Lenacil, Linuron, Mandipropamid, Mefenacet, Mepanipyrim, Mepronil, Metalaxyl, Metazachlor, Metconazole, Methabenzthiazuron, Methiocarb, Methoprotryne, Methoxyfenozide, Metobromuron, Metolachlor, Metribuzin, Mevinphos, Mexacarbate, Monocrotophos, Monolinuron, Moxidectin, Myclobutanil, Neburon, Nitenpyram, Novaluron, Nuarimol, Omethoate, Oxadixyl, Oxamyl, Paclobutrazol, Penconazole, Phenmedipham, Picoxystrobin, Piperonyl butoxide, Pirimicarb, Pirimiphos-methyl, Prochloraz, Prometon, Prometryn, Propachlor, Propamocarb, Propanil, Propargite, Propiconazole, Propoxur, Propyzamide, Pymetrozine, Pyracarbolid, Pyraclofos, Pyraclostrobin, Pyridaben, Pyridaphenthion, Pyrimethanil, Pyriproxyfen, Quinalphos, Quinoxyfen, Rotenone, Secbumeton, Siduron, Simetryn, Spinetoram (J), Spinetoram (L), Spinosad A, Spinosad D, Spirodiclofen, Spiroxamine, Tebuconazole, Tebufenpyrad, Tebuthiuron, Temephos, Terbumeton, Terbuthylazine, Terbutryn, Tetrachlorvinphos, Tetraconazole, Tetradifon, Thiabendazole, Thiacloprid, Thiamethoxam, Thidiazuron, Thiobencarb, Thiophanate-methyl, Triadimefon, Triadimenol, Triazophos, Trichlorfon, Tricyclazole, Trifloxystrobin, Triflumizole, Triflumuron, Triticonazole, Vamidothion, Zoxamide	*In-house method O.665 based on BS EN 15662 (UPLC/MS/MS)*
9. Foodstuffs of vegetable origin, fresh and processed	1. Determination of Dietary fibers	*In-house method O.118 based on AOAC 991.43*
	2. Determination of total & digestible carbohydrates (calculation)	*In-house method O.144 based on FAO-Food energy methods of analysis and conversion factors*
	3. Determination of Energy (calculation)	*In-house method O.144 based on Regulation (EC) 1169/2011*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
10. Animal feeds	1. Determination of Nitrogen	*ISO 1871:2009*
	2. Determination of Total Fat	*Regulation (EC) 152/2009 as in force, Method G, 2.2*
	3. Determination of directly extractable Fats	*Regulation (EC) 152/2009 as in force, Method G, 2.1*
	4. Determination of crude fibre	*In-house method O.116*
	5. Determination of Moisture and Dry total matter	*In-house method O.113*
	6. Determination of Ash	*In-house method O.111*
	7. Determination of Metals[$$] (As, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Na, P, Pb, Zn etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house method μέθοδος O.521[$$$] based on AOAC 2015.01/ ICP-MS*
11. Materials in contact with foodstuffs	1. Overall migration into evaporable simulants: A, B, C, D1 (50% ethanol) and Substitutes of simulant D2 (Ethanol 95% and Isooctane) using the following test methods: - total immersion - article filling - pouch -reverse pouch - cell	*EN 1186-3:2022*
	2. Overall migration into simulant D2 (vegetable oil) using the following test methods: - total immersion - article filling - pouch -reverse pouch - cell	*In-house method O.626 based on EN 1186-2:2022*
	3. Overall migration using simulant E (adsorption by poly(2,6-diphenyl-p-phenylene oxide)- Tenax®)	*In-house method O.125 based on EN 1186-13 B:2002 & EN 14338:2003*
	4. Specific migration of Primary Aromatic Amines into aqueous simulants (A, B, C)	*BVL L 00.00-6*
	5. Specific migration of metals into simulant 3% acetic[$$]: (Al, As, Ba, Ca, Cd, Co, Cr, Cu, Eu, Fe, Gd, Hg, K, La, Li, Mg, Mn, Na, Ni, Pb, Sb, Tb, Zn etc.) [$$] Detailed list of accredited activities in flexible scope	*In-house method O.522[$$$] based on ISO 17294-1 & ISO 17294-2 / ICP-MS*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
11. Materials in contact with foodstuffs (continued)	6. Specific migration in food simulants [$] [$] (A,B,C,D1,D2 and ethanol 95%) (phthalates, Bisphenol A, Phthalic acids etc) [$$] Detailed list of accredited activities in flexible scope	*In-house methods*[$$$] *HPLC, GC-MS, LIQUID-LIQUID EXTRACTION, DIRECT INJECTION*
	7. Specific migration of Formaldehyde into aqueous simulants (A, B, C) and simulant D_1 (50% ethanol)	*In-house method O.322 based on EN 13130-23:2005*
	8. Specific Migration Assessment/ Semi-Quantitative Determination of Semi-Volatile Substances (NIAS + IAS) in EtOH 95% and Toxicological Evaluation based on TTC and Cramer Models.	*In-house method O.662 based on EN 13130-1 (GC/MS)*
	9. Specific Migration Assessment/ Semi-Quantitative Determination of Semi-Volatile Substances (NIAS + IAS) in Isooctane and Toxicological Evaluation based on TTC and Cramer Models.	*In-house method O.662 based on EN 13130-1 (GC/MS)*
12. Materials in contact with foodstuffs- Paper and board	1. Determination of Pentachlorophenol	*In-house method O.635 based on ISO 15320*
	2. Determination of Cadmium	*In-house method O.523/ ICP-MS*
	3. Determination of Lead	*In-house method O.523/ ICP-MS*
	4. Determination of Mercury	*In-house method O.523/ ICP-MS*
	5. Determination of Formaldehyde in cold extract water	*In-house method O.322 based on EN 645:1994 και EN 1541:2001*
	6. Determination of extractable metals in hot/cold water extract (Al, Cd, Hg, Pb)	*In-house method O.524 based on BS EN 645, BS EN 647, ISO 17294-1 & 17294-2/ ICP-MS*
13. Soil and solid wastes	Determination of Hydrocarbons C10-C40	*In-house method O.649 based on EN 14039*
14.Vegetable oils	1. Determination of 10 Phthalate Ester: DMP: Dimethyl Phthalate DEP: Diethyl Phthalate DIBP: Diisobutyl Phthalate DBP: Dibutyl Phthalate BBP: Benzyl-butyl Phthalate DEHP: Bis (2-ethylhexyl) phthalate DCHP: Dicyclohexyl Phthalate DNOP: Di-n-octyl Phthalate DINP: Diisononyl Phthalate DIDP: Diisodecyl Phthalate	*In-house method O.651 based on Food Additives and Contaminants, 1999, Vol. 16, No. 5, 197-206*
	2. Determination of Bisphenol A	*In-house method O.653 (HPLC-FLD)*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
15. Bakery and Pastry Raw Materials, Flour	Determination of Ascorbic Acid	*In-house method O.647 / HPLC/DAD*
16. Meat and meat products, Cold cuts, Dairy products, Fruits, Vegetables and their products	Determination of Nitrate	*In-house method O.121 based on EN 12014-4:2005*
17. Meat and meat products, Cold cuts, Dairy products	Determination of Nitrite	*In-house method O.121 based on EN 12014-3:2005*
18. Food Additives	Determination of Nitrate & Nitrite	*In-house method O.654 based on EN 12014-4:2005*
19. Catches and Fishery Products	Determination of Net Weight and glaze percentage	*In-house method O.147 based on CODEX STAN 190-1995 and CODEX STAN 165-1989*
20. Transformer Oils	Determination of PCB's	*EN 61619*
21. Samples of processed aloe	1. Determination of Aloin	*In-house method O.655 based on Journal of AOAC International (2014) Vol. 97, No. 5: p.1323-1328 / HPLC-UV*
	2. Determination of Acemannan	*AOAC Official Method 2018.14*
22. Wastewater of Industrial Soap Production	Determination of Glycerol	*In-house method O.149, ENZYMATIC*
23. Soil & Sediments	Determination of Metals (Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Sn, Sr, Ti, V, Zn)	*In-house method O.525 based on EPA 3051/ ICP-MS*
24. Sludges	Determination of Metals (Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Sn, Sr, V, Zn)	*In-house method O.525 based on EPA 3051/ ICP-MS*
Microbiological Tests		
1. Water for human consumption, surface water, groundwater, pool water, sea water[##]	1.Detection and enumeration of *Escherichia coli* and coliform bacteria	*ISO 9308-1*[#]
	2. Detection and enumeration of intestinal enterococci	*ISO 7899-2*[#]
	3. Enumeration of culturable micro-organisms at 22±2 °C and at 36±2 °C	*ISO 6222*[#]

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
2. Water for human consumption, surface water, groundwater, pool water[##]	1. Detection and enumeration of *Pseudomonas aeruginosa*	*ISO 16266*[#]
	2. Detection and enumeration of *Cl. perfrigens* (including spores)	*ISO 14189*[#]
3. Water with a low concentration of interfering microorganisms (Matrix A)	Enumeration of Legionella	*ISO 11731*[#], *(Annex J, Procedure 1 Medium A-BCYE & B-BCYE+AB)* *(Annex J, Procedures 5,7, 8,9,10 Medium A-BCYE & C – GVPC)*
4. Water with a high concentration of interfering microorganisms (Matrix B)	Enumeration of Legionella	*ISO 11731*[#], *(Annex J, Procedures 8,9,10, Medium C – GVPC)*
5. Water with extremely high concentration of interfering microorganisms (Matrix C)	Enumeration of Legionella	*ISO 11731*[#], *(Annex J, Procedures 4, 14, Medium C – GVPC)*
6. Legionella isolates from water samples	Identification of the following species: L. pneumophila serogroup 1 and L. pneumophila serogroups 2-14	*Latex agglutination*
7. Wastewater	1.Enumeration of Total coliforms	*APHA 9222B*[#]
	2. Enumeration of Fecal coliforms	*APHA 9222D*[#]
	3. Enumeration of *Total coliforms* and *Escherichia coli*	*ISO 9308-1*[#]
8. Food and animal feeding stuffs[###]	1. Enumeration of total coliforms	*ISO 4832*[#]
	2. Enumeration of *Escherichia coli*	*ISO 7251*[#]
	3. Detection of *Listeria monocytogenes*	*ISO 11290-1*[#]
	4. Detection of *Salmonella* spp. (ex svs typhi, paratyphi)	*ISO 6579-1*[#]
	5. Enumeration of coagulase positive Staphylococcus	*ISO 6888-2*[#]
	6. Enumeration of microorganisms -- Colony-count technique at 30^0 C	*ISO 4833-1*[#]
	7. Enumeration of *Bacillus cereus*	*ISO 7932*[#]
	8. Enumeration of *Clostridium perfringens*	*ISO 15213-2*[#]
	9. Enumeration of Enterobacteriaceae	*ISO 21528-2*[#]

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
	10. Enumeration of *Escherichia coli*	*ISO 16649-2*[#]
	11. Enumeration of *Listeria monocytogenes*	*ISO 11290-2*[#]
	12. Enumeration of beta-glucuronidase-positive *Escherichia coli* (MPN technique)	*ISO 16649-3*[#]
9. Food and animal feeding stuffs with a_w>0,95	Enumeration of yeasts and moulds	*ISO 21527-1*[#]
10. Food and animal feeding stuffs with a_w≤0,95	Enumeration of yeasts and moulds	*ISO 21527-2*[#]
11. **A**nimal faeces and environmental samples from the primary production stage	Detection of non-typhoidal -paratyphoid *Salmonella* spp.	*ISO 6579-1*[#]
12. Products intended for human consumption, animal feeding **&** environmental samples in the area of food and feed production	Enumeration of Campylobacter spp	*ISO 10272-2*[#]
13. Food[###] (Fish & other Seafood)	Detection of Vibrio parahaemolyticus	*ISO 21872-1* [#]
Molecular Tests		
1. Foodstuffs	1. Detection of Salmonella spp.	*In-house method O.400 based on ISO 6579-1 & ISO 22174, Real-Time PCR*
	2. Detection of Listeria monocytogenes	*In-house method O.401 based on ISO 11290-1 & ISO 22174, Real-Time PCR*
	3. Detection of EU NUTS Allergens: Almonds, Cashews, Pistachio nuts, Peanuts, Hazelnuts, Walnuts, Pecan nuts, Brazil nuts, Macadamia nuts	*In-house method O.402 based on EN 15634-1, Real-Time PCR*

Tested Materials / Products	Types of test / Properties measured	Applied methods / Techniques used
	4. Detection of Allergens: Soybeans, Celery, Mustard	*In-house method O.403 based on EN 15634-1,* *Real-Time PCR*
2. Food (Fish & other Seafood)	Detection of Vibrio parahaemolyticus	In-house method *O.405* based on *ISO 21872-1 & ISO 22174* *Real-Time PCR*
Sampling		
1. Water for human consumption	Determination of chemical and microbiological parameters	*ISO 5667-1:2023* *ISO 5667-3:2024* *ISO 5667-5:2006* *ISO 5667-14:2014* *ISO 19458:2006*
2. Samples from surfaces using contact plates and swabs	Horizontal methods for sampling techniques for microbiology tests	*ISO 18593:2018*

$ Flexibility applies to adding new materials/products to existing methods/analytes.
$$ Flexibility applies to new analytes to existing methods/ materials/products.
$$$ Flexibility applies to modifying existing methods (Method range, limit of detection, limit of quantification).

 # The laboratory has the flexibility to adopt revised versions of the standards.
New materials/products flexibility is applied in accordance with ISO 13843.
New materials/products flexibility is applied in accordance with ISO 16140-3.

****Methods marked with (*) are in accordance with the method specification of Common Ministerial Decision D1 (δ)/ΓΠ 27829/2023 (ΦΕΚ 3525/Β/25-5-2023) and the Directive (EU) 2020/2184 concerning the quality of of water intended for human consumption.***

***** Methods marked with (**) are in accordance with the method specification of European Commission EC/333/2007 and its amendments.***

1. *American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017*
2. AOAC: Association of Analytical Communities
3. *EPA:* Environmental Protection Agency

Site of assessment: **Permanent laboratory premises – 12 Tsamadou Str., Piraeus, Attiki, Greece**
Approved signatories: **A. Tsakalidis, A. Gagomoiros, P. Drillia**

This scope of Accreditation replaces the previous one, dated 12.09.2025.
The Accreditation Certificate No. **16**-7, according to ELOT EN ISO/IEC 17025:2017, has been renewed until 12.03.2030.

Athens, 9th of January 2026

Konstantinou Evangelos Apostolos
CEO of ESYD