# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title:**  **Supply of consumables for the purposes of the scientific laboratories of the BLUE GROWTH Research centre at Trakya University of Edirne**

***LOT 2:*** Supply of consumables for diffuse pollution monitoring and analysis ( certified materials)

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**Publication reference:** CB005.3.12.001 – PP2 – Supply 8

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

| **1.**  **İtems number** | **2.**  **Specifications required** | **3.**  **Specifications offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation committee’s notes** |
| --- | --- | --- | --- | --- |
| **13** | **Consumables for Certified materials:**  PCB 209 -2 units   * 10±0.5 μg/mL in isooctane, 5ml   PCB No 28, 52, 101, 138, 153, 180 solution – 2 units:   * Analytical standart grade: , Mix Standard Solution of multicomponents: Each compound (7 PCB) should be at exact 10µg/mL concentration in isooctane or other suitable solvent-2mL.   EPA CLP Organochlorine Pesticide Mix – 2 units:   * Analytical standart grade: , Mix Standard Solution of multicomponents: Each component-compound (16 OCPs) should be at 2000µg/mL concentration in hexane:toluene-1mL , or , 2000µg/mL in hexane-1mL , "Should contain: Endosulfan (α isomer), 2,2-bis(p-Chlorophenyl)-1,1-dichloroethylene, 1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane, 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane, Aldrin, Dieldrin, (1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane, Methoxychlor, Gammaxene, 2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane, (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane, Endrin, β-Endosulfan, Endosulfan sulfate, Heptachlor, Heptachlor epoxide, α-Hexcahlorocyclohexane"   Analytical standarts 1 set:   * N-(Phosphonomethyl)glycine –(Glyphosate) Analytical standart: Form-solid, Concentration <= 100 % , CAS No: 1071-83-6 3 packages (250 mg per each package) * Glyphosate-2-13C (13CC2H8NO5P) Analytical standart-İsotope labelled: Form-solid, Concentration <= 100 % , CAS No: 287399-31-9 1 package (100mg) per each package * (Aminomethyl)phosphonic acid-(AMPA) Analytical standart: Form-solid, Concentration <= 100 % , CAS No: 1066-51-9 2 package (50 mg per each package) * 9-fluorenylmethyl chloroformate (FMOC-Cl) Form-solid-crystalline, Concentration ≥ 97 % , CAS No: 28920-43-6 1 package (5 g per each package) * Bisphenol A Analytical standart: Certified reference material, crystaline form, content <= 100 %. , CAS No: 80-05-7 1 package (100 mg per each package) * Bisphenol E Analytical standart, crystaline form, content <= 100 %. , CAS No: 2081-08-5 1 package (100 mg per each package) * PCB-30: 2,4,6-trichlorobiphenyl Analytical standart solution: Volume 5 mL, conentration 10±0.5µg/mL in isooctan , CAS No: 35693-92-6 , 1 package (1x5 mL ampoule per each package) * PCB-138: 13C-labbeled 2,2’,3,4,4’,5’-hexachlorobiphenyl Internal Standard:Isotope labelled: 13C6, 99%. 40±2µg/mL in nonane, Chemical purity 99%. Volume 1 mL. 1 package (1x1 mL ampoule per each package) * Isooctane For gas chromatography ECD and FID detection. , CAS No: 540-84-1 1 package (1 lt per each package) * Pesticide Mix: It must be includes 206 commonly-found pesticides as standards, It must be formulated in 10 mixes of about 20 pesticides each, It must be provided with an initial concentration of 100 µg/mL in 100% acetonitrile, It must be tested for long-term stability (1 year when stored at -20 ˚C), Certified for internal calibration or as an external calibration reference material. , It must be contain pesticides standarts belows; Hydroxycarbofuran , Abamectin , Acephate , Acetamiprid , Acibenzolar-S-methyl , Alanycarb , Aldicarb , Aldicarb sulfone , Aldicarb sulfoxide , Ametryn , Aminocarb , Amitraz , Azoxystrobin , Benalaxyl , Bendiocarb , Benfuracarb , Benzoximate , Bifenazate , Bitertanol , Boscalid , Bromucanozole , Bupirimate , Buprofezin , Butafenacil , Butocarboxim , Butoxycarboxim , Carbaryl , Carbendazim , Carbetamide , Carbofuran , Carboxin , Carfentrazone-ethyl , Chlorantraniliprole , Chlorfluazuron , Chlorotoluron , Chloroxuron , Clethodim , Clofentezine , Clothianidin , Cyazofamid , Cycluron , Cymoxanil , Cyproconazole , Cyprodinil , Cyromazine , Desmedipham , Diclobutrazol , Dicrotophos , Diethofencarb , Difenoconazole , Diflubenzuron , Dimethoate , Dimethomorph , Dimoxystrobin , Diniconazole , Dinotefuran , Dioxacarb , Diuron , Doramectin , Emamectin-benzoate , Epoxiconazole , Eprinomectin , Etaconazole , Ethiofencarb , Ethiprole , Ethirimol , Ethofumesate , Etoxazole , Famoxadone , Fenamidone , Fenarimol , Fenazaquin , Fenbuconazole , Fenhexamid , Fenobucarb , Fenoxycarb , Fenpropimorph , Fenpyroximate , Fenuron , Fipronil , Flonicamid , Fluazinam , Flubendimide , Fludioxonil , Flufenacet , Flufenoxuron , Fluometuron , Fluoxastrobin , Fluquinconazole , Flusilazole , Flutolanil , Flutriafol , Forchlorfenuron , Formetanate HCL , Fuberidazole , Furalaxyl , Furathiocarb , Halofenozide , Hexaconazole , Hexaflumuron , Hexythiazox , Hydramethylnon , Imazalil , Imidacloprid , Indoxacarb , Ipconazole , Iprovalicarb , Isocarbophos , Isoprocarb , Isoproturon , Ivermectin , Kresoxim-methyl , Linuron , Lufenuron , Mandipropamid , Mefenacet , Mepanipyrim , Mepronil , Mesotrione , Metaflumizone , Metalaxyl , Metconazole , Methabenzthiazuron , Methamidophos , Methiocarb , Methomyl , Methoprotryne , Methoxyfenozide , Metobromuron , Metribuzin , Mevinphos , Mexacarbate , Monocrotophos , Monolinuron , Moxidectin , Myclobutanil , Neburon , Nitenpyram , Novaluron , Nuarimol , Omethoate , Oxadixyl , Oxamyl , Paclobutrazol , Penconazole , Pencycuron , Phenmedipham , Picoxystrobin , Piperonyl butoxide , Pirimicarb , Prochloraz , Promecarb , Prometon , Prometryne , Propamocarb , Propargite , Propham , Propiconazole , Propoxur , Prothioconazole , Pymetrozine , Pyracarbolid , Pyraclostrobin , Pyridaben , Pyrimethanil , Pyriproxyfen , Quinoxyfen , Rotenone , Secbumeton , Siduron , Simetryn , Spinetoram , Spinosad , Spirodiclofen , Spiromesifen , Spirotetramat , Spiroxamine , Sulfentrazone , Tebuconazole , Tebufenozide , Tebufenpyrad , Tebuthiuron , Teflubenzuron , Temephos , Terbumeton , Terbutryn , Tetraconazole , Thiabendazole , Thiacloprid , Thiamethoxam , Thidiazuron , Thiobencarb , Thiofanox , Thiophanate-methyl , Triadimefon , Triadimenol , Trichlorfon , Tricyclazole , Trifloxystrobin , Triflumizole , Triflumuron , Triticonazole , Vamidothion , Zoxamide 1 package (10x1 mL ampoule per each package) * Phthalate Compounds standart: Certified reference material:multicomponent solution, each compound should be at 2000 µg/L concentration in hexane or appropriate solvent., Should contian Benzyl butyl phthalate, Di-butyl phthalate, Bis(2-ethylhexyl) phthalate, 2 package (2x1 mL ampoule per each package) * Dimethyl phthalate Certified reference material: 500 µg/L concentration in methanol or appropriate solvent. , CAS No: 131-11-3 1 package (1 mL ampoule per each package) * Bis(4-methylpentyl)phthalate Analytical standart: content ≤ 100 % , CAS No: 259139-51-0 1 package (100 mg per each package) * EPA 506 Phthalate Mix: Certified reference material:multicomponent solution, each compound should be at 1000 µg/L concentration in isooctane or appropriate solvent. Components: benzyl butyl phthalate, bis(2-ethylhexyl) adipate, bis(2-ethylhexyl) phthalate, dibutyl phthalate, diethyl phthalate, dimethyl phthalate, and di-n-octyl phthalate 3 package (3x1 mL ampoule per each package) * Certified Reference Material IAEA-412 Radionuclides In Pacific Ocean Sediment - 2 units:   IAEA-412 (K-40, Cs-137, Pb-210, Ra-226, Ra-228, Th-228, Th-232,U-235, U-238, Pu-239,Pu-240) ,100 g, Radionuclide Certified value [Bq kg-1 ] Expanded uncertainty [Bq kg-1 ], 40K 561 26, 137Cs 5.66 0.17, 210Pb 88.2 3.2, 210Po 89.7 3.8, 226Ra 27.4 1.0, 228Ra 36.2 2.3, 228Th 36.3 1.1, 232Th 36.3 3.5, 235U 1.38 0.05, 238U 31.2 1.7, 239Pu 0.358 0.012, 240Pu 0.240 0.011, 239/240Pu 0.611 0.016, , " 2 item, ,   * Dibutyl phthalate-3,4,5,6-d 4 (C16D4H18O4): Analytical standart: İsotope labelled standart. , CAS No: 93952-11-5 1 package (25 mg per package) * Mussel tissue certified reference material – 1 unit:   Certfied for the mass fractions of As, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Rb, Se, Sr, Zn, • 8g, Elements Certified value, [mg/kg] - Uncertainty, [mg/kg], As 6.7 0.4, Cd 0.336 0.025, Cr 0.73 0.22, Cu 5.98 0.27, Fe 161 8, Hg 0.071 0.007, Mn 4.88 0.24, Ni 0.69 0.15, Pb 2.18 0.18, Rb 2.46 0.16, Se 1.62 0.12, Sr 19.0 1.2, Zn 71.   * Gama Emitting Radionuclide Mixture – 1 Unit:   The gamma emmitting radionuclide mixture should be homogeneously dispersed in the sand matrix filled in the container described below, The dimensions of the empty container to be filled with gamma emitting radionuclide mixture are given below, 96, 55 cm3 plastic cylindrical container, Height of cylindrical container: 5, 30 cm, Filled sample height: 4, 00 cm, Outer thickness: 0, 25 cm, Inner diameter : 5, 55 cm (avg, ), Internal volume (filled): 96, 55 cm3, The filling height must be at the level marked on each container and exactly aligned with the bottom surface of the lid, and must be sealed after filling, , The content of the radionuclide mixture to be filled with sand into a 96, 55 cm3 plastic cylinder container should be as follow;, It should be contain a mixture of Cd-109, Ce-139, Co-57, Co-60, Cs-137, Sn-113, Sr-85, Y-88, Hg-203 with a nominal activity of 37 kBq, , The effective density of the sand matrix should be 1, 7 g/ cm3, , The sand matrix should be in the range of 50-70 mesh, , The container to be filled, transportation of the container empty and filled with radionuclide mixture, cargo, import, export, customs clearance and delivery are all the responsibility of the bidder, In these matters, the company can not charge any additional fees, , The certificate of radionuclide mixture must be provided, , The radioactive mixture must be delivered within 4 weeks at the latest from the date of certificate, , The bidder must have import, export and transportation licenses approved by the Turkish Nuclear Regulatory Authority for the purpose of importing the radionuclide mixture in the desired sample container and delivering it to the customer, , Each staff member of the bidder who will be involved in the transportation of gamma mixtures to the customer must wear a dosimeter and have received “Training on the Safe Transport of Radioactivite Material. |  |  |  |