



Republic of the Philippines
Department of Agriculture
BUREAU OF SOILS AND WATER MANAGEMENT
SRDC Building Elliptical Road corner Visayas Avenue,
Diliman, Quezon City 1101
customers.center@bswm.da.gov.ph
Tel. no. (632) 8273-2474 local 3202

BSWM- BIDS AND AWARDS COMMITTEE SUPPLEMENTAL BID BULLETIN NO. 2

CONTRACT: Supply and Delivery of various Chemicals, Laboratory Supplies, Microbiological Parameters and Certified and Quality Reference Materials for CY 2024- IB NO: BSWM 2024-01-020

This Addendum is being issued in accordance with Section 22.5.2 of the IRR of RA 9184, to clarify and modify some provisions of the Bidding Document. **THIS SHALL FORM AN INTEGRAL PART OF THE BID DOCUMENT.**

AMENDMENTS OF THE BIDDING DOCUMENT:

AMENDMENT	SECOND AMENDMENT
Section I. Invitation to Bid: Lot 1- Supply and Delivery of various Chemicals (ABC: PhP 6,094,040.00) Lot 2- Supply and Delivery of various Laboratory supplies (ABC: PhP 4,420,950.00) Lot 3- Supply and Delivery of various Microbiological Parameters (ABC: PhP 554,300.00) Lot 4- Supply and Delivery of various Certified and Quality Reference Materials (ABC: PhP 2,856,960.00)	Section I. Invitation to Bid: Lot 1- Supply and Delivery of various Chemicals (ABC: PhP 6,149,040.00) Lot 2- Supply and Delivery of various Laboratory supplies (ABC: PhP 4,420,950.00) Lot 3- Supply and Delivery of various Microbiological Parameters (ABC: PhP 554,300.00) Lot 4- Supply and Delivery of various Certified and Quality Reference Materials (ABC: PhP 2,856,960.00)
Lot 2- Supply and Delivery of various Laboratory supplies Item No. 1 Polyethylene Terephthalate (PET) Bottles Capacity: 500 mL, opaque, color white	Lot 2- Supply and Delivery of various Laboratory supplies Item No. 1 High-density polyethylene (HDPE) Canister/Container, screw cap Capacity: 500 mL, opaque, color white
Submission of Bids: until February 29, 2024- 9:00AM Opening of Bids: February 29, 2024- 9:30AM	Submission of Bids: until March 7, 2024- 9:00AM Opening of Bids: March 7, 2024- 9:30AM



	<u>Please see attached Annex A for the Revised Section VII. Technical Specifications (For Lots 1 and 2)</u>
--	--

A complete set of Bidding Document may be acquired by interested Bidders until **March 6, 2024 3:00PM** from the address and website.

(Sgd)DENISE A. SOLANO
BAC Chairperson

ANNEX A

Section VII. Revised Technical Specifications

Item	Specification	Statement of Compliance
<p><i>[Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder’s statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>		

Lot 1- Supply and Delivery of various Chemicals

Item No.	Item Description	Quantity	Statement of Compliance
	Supply and Delivery of various Chemicals		
	LSD NSHP 2024-01-0050		
1	NIST Traceable pH Buffer Solution pH 7.00; 1L/bottle	17	
2	NIST Traceable pH Buffer Solution pH 4.00; 1L/bottle	17	
3	NIST Traceable pH Buffer Solution pH 10.00; 1L/bottle	17	
4	EC Standard NIST Traceable with Certificate of Analysis, 84uS/cm, 500 ml/bottle	17	
5	EC Standard NIST Traceable with Certificate of Analysis, 12.88mS/cm, 5bottle x60mL	17	
6	EC Standard NIST Traceable with Certificate of Analysis, 147uS/cm, 500 ml/bottle	17	
7	EC Standard NIST Traceable with Certificate of Analysis, 1413uS/cm, 500 ml/bottle	17	
8	Iron Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
9	Manganese Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
10	Zinc Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
11	Copper Standard(NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
12	Calcium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	

13	Magnesium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
14	Sodium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
15	Potassium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle	17	
16	Phosphorus Standard, 500ml/bottle, NIST Traceable with Certificate of Analysis	17	
17	Standard metal solutions for ICP, NIST Traceable with COA, 500mL/bottle: Cu, Fe, Mn, Zn, Ca, Mg, Na, K, Pb, As, Hg, Cd, Ag, Cr, Ni	2	
18	L-lysine Monohydrochloride, NIST Traceable with Certificate of Analysis AR, 100g/bottle	17	
19	Tris(hydroxymethyl)aminomethane (THAM), NIST Traceable with Certificate of Analysis, ≥99% Powder, 100g/bottle	2	
20	Sucrose Standard, NIST Traceable with Certificate of Analysis, 100g/bottle	2	
21	Electrolyte solution, 3 M KCl, 50 mL, with Certificate of Analysis	6	
22	REFERENCE ELECTROLYTE FILL SOLUTION, 3.5 M KCl, 30 mL for double junction electrode, set of 4, with Certificate of Analysis	2	
23	Buffer Powder Pillows, pH 4.01, Color-coded Red, 250pcs./pk, NIST Traceable with COA	1	
24	Buffer Powder Pillows, pH 7.00 Color-coded Yellow, 250pcs./pk, NIST Traceable with COA	1	
25	Buffer Powder Pillows, pH 10.01 Color-coded Blue, 250pcs./pk, NIST Traceable with COA	1	
26	Standard phosphate solution, AR, 500mL/btl, NIST Traceable with COA	5	
27	Nitrate Standard, AR, 500mL/btl, NIST Traceable with COA	5	
28	Sodium hydroxide, pellets, 1 Kg/pack, Technical Grade	20	
29	Sodium hydroxide, flakes, 2 Kg/pack, Technical Grade	20	
30	Sodium Bicarbonate, AR, 500g/bottle	18	
31	Sodium Dithionite, AR, 500g/bottle	15	
32	Sodium Acetate, AR, 500g/bottle	15	
33	Sodium Citrate Tribasic Dihydrate, AR, 500g/bottle	15	
34	Ammonium Acetate, AR 98%, 500g/bottle	10	
35	Ammonium Fluoride, AR grade, 500g/bottle	7	
36	Potassium Dichromate, AR, Powder, 500g/bottle	15	
37	Ammonium Sulfate, AR, 500g/bottle	5	
38	Copper sulfate pentahydrate, AR, 500g/bottle	5	
39	Ammonium Molybdate Tetrahydrate, AR, 500g, bottle	10	
40	Ascorbic Acid, 100g/bottle, AR	10	
41	Potassium Antimony Tartrate, AR, 500g/bottle	20	
42	Methyl Red, AR, 5g/bottle	5	
43	Bromocresol green, AR, 5g/bottle	8	
44	Boric Acid AR, 500g/bottle	10	
45	Activated Charcoal, AR, Phosphate free, 1kg/bottle	5	
46	Sodium Hexametaphosphate, AR, 500g/bottle	20	
47	Chlorophenol Red, Indicator grade, AR, 5g/bottle,	7	
48	Bromothymol Blue Indicator, AR, 5g/bottle	5	
49	Sodium Cobaltinitrite, extra pure, AR, 100g/bottle	10	
50	Phenolphthalein, 500g/bottle, AR	6	
51	Ammonium metavanadate, AR, powder, 500g/bottle	2	

52	Ammonium Chloride, AR, 500g/bottle	6	
53	Ammonium hydroxide, conc., AR, 2.5 L/bottle	8	
54	Potassium chloride, AR, 500g/bottle	10	
55	Potassium Chromate, AR, 500g/bottle	7	
56	Silver Nitrate, AR, 250g/bottle	1	
57	Sodium chloride, AR, 500g/bottle	18	
58	Calcium Carbonate, 500g/bottle, AR	5	
59	Diethyltriaminepentaacetic acid (DTPA), AR, 100g/bottle	2	
60	Potassium Nitrate, AR, 500g/bottle	2	
61	Magnesium Chloride hexahydrate, 500g/bottle, AR	2	
62	Kjeltabs VCM, Content per tablet: 3.5g Potassium Sulfate and 0.1g Copper Sulfate, 1000pcs/box. Attached SDS/COA of item	3	
63	Sodium Nitrite, AR, 500g/bottle	20	
64	Ferrous Sulfate Heptahydrate, ACS reagent, ≥99%, 250g/bottle	6	
65	Sulphanilamide, AR, 50 g/btl	5	
66	N-(1-naphtyl)-ethylenediamine dihydrochloride (NED), AR, 100g/btl	5	
67	Zinc powder, 99.99%, AR, 10g/btl	5	
68	p-nitroaniline, AR, 500g/btl	5	
69	Potassium bromide, AR, 250g/btl	5	
70	Aluminum potassium sulfate, AR, 100g/btl	5	
71	Aluminum ammonium sulfate, AR, 500g/btl	5	
72	Tin wire, >99.99% purity, 1m, diameter:0.5mm	5	
73	Polyvinyl alcohol (PVA), AR grade, 250g, 99.999% purity	5	
74	Sodium Carbonate, AR, 500g/btl	5	
75	Metacresol purple, AR, 5g/btl	5	
76	gum acacia, AR, 500g/bottle	2	
77	Barium Chloride dihydrate, AR, 500g/bottle	2	
78	Sulfuric Acid, AR, Concentrated 2.5 L/bottle, staggered delivery Statutory Requirements: Must have PNP permit to purchase or equivalent	20	
79	Hydrochloric Acid, AR, Concentrated, 2.5 L/bottle, staggered Statutory Requirements: Must have PNP permit to purchase or equivalent	20	
80	Nitric Acid, AR, 2.5L/bottle ≥68%, staggered delivery Statutory Requirements: Must have PNP permit to purchase or equivalent	10	
81	Orthophosphoric Acid (Analytical/Lab Grade; Liquid; Odorless; Completely Miscible; 1.685 g/cm ³ density; >99% Purity), 500ml/bottle	10	
82	Hydrogen Peroxide, AR, 30-50%, 500ml/bottle Statutory Requirements: Must have PNP permit to purchase or equivalent	8	
83	Chromotropic acid, AR, 100g/btl	5	
84	Malonic acid, AR, 500g/btl	5	
85	Acetic acid, 99%, 1000mL/bottle	2	
86	Ethanol, technical grade, 95%, 20L/ carboy	20	
87	Triethanol amine, AR, 1 L/Bottle	10	
88	Ethanol AR ≥ 99% 2.5 L/bottle	30	

89	Amyl Alcohol, ≥99%, 1000ml/bottle	3	
90	Isopropyl alcohol, 70%, 1000mL/bottle	15	
91	Toluene, Certified ACS, ≥99.5%, 500ml/bottle	1	
92	Calcium Chloride Dihydrate, ACS, 500g/bottle at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
93	Maleic acid, ACS 99.0%, 500g/btl	1	
94	Citric Acid, ACS, 100g/bottle at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
95	Di-sodium p-nitrophenyl phosphate hexahydrate, suitable for enzyme immunoassay, ≥99.0% (enzymatic), 5g/bottle	1	
96	p-nitrophenol, ACS, ≥99%, 50g/btl	1	
	LSD PD 1435 2024-01-0050		
97	ICP-OES Standard - Arsenic ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
98	ICP-OES Wavelength Calibration Solution; 500 mL, contains 50 mg/L Al, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sr, Zn and 500 mg/L K in 5 % HNO ₃ with Certificate of Analysis & Material Safety Data Sheet	3	
99	ICP-OES Standard - Aluminum ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
100	ICP-OES Standard - Boron ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
101	ICP-OES Standard - Barium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
102	ICP-OES Standard - Cadmium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
103	ICP-OES Standard - Calcium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
104	ICP-OES Standard - Chromium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
105	ICP-OES Standard - Cobalt ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
106	ICP-OES Standard - Copper ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
107	ICP-OES Standard - Iron ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	

108	ICP-OES Standard - Lead ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
109	ICP-OES Standard - Magnesium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
110	ICP-OES Standard - Manganese ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
111	ICP-OES Standard - Molybdenum ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
112	ICP-OES Standard - Nickel ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
113	ICP-OES Standard - Potassium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
114	ICP-OES Standard - Sodium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
115	ICP-OES Standard - Strontium ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
116	ICP-OES Standard - Zinc ICP Standard NIST Traceable with Certificate of Analysis, 1 g/L equivalent 1000 ug/mL As in nitric acid (nominal concentration), 100 mL	2	
117	Ethylenediaminetetraacetic acid (EDTA), AR, 500g/bottle	3	
118	Ammonium Nitrate AR 1kg/bottle, Supplier must have PNP required permits on Controlled Chemicals and must have COA or MSDS included	2	
119	Ammonium Fluoride , AR grade, 98% 500 g/bottle	1	
	LSD REG 2024-01-0050		
120	NIST Traceable pH Buffer Solution pH 7.00; 1L/bottle	2	
121	NIST Traceable pH Buffer Solution pH 4.00; 1L/bottle	2	
122	NIST Traceable pH Buffer Solution pH 10.00; 1L/bottle	2	
123	EC Standard NIST Traceable with Certificate of Analysis, 84uS/cm, 500 ml/bottle	2	
124	EC Standard NIST Traceable with Certificate of Analysis, 12.88mS/cm, 5bottle x60mL	2	
125	EC Standard NIST Traceable with Certificate of Analysis, 147uS/cm, 500 ml/bottle	2	
126	EC Standard NIST Traceable with Certificate of Analysis, 1413uS/cm, 500 ml/bottle	2	
127	Iron Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	1	
128	Manganese Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	1	

129	Zinc Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	1	
130	Copper Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	1	
131	Calcium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	2	
132	Magnesium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	2	
133	Sodium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	2	
134	Potassium Standard (NIST Traceable with Certificate of Analysis), 500mL/bottle, 1000ppm	2	
135	Phosphorus Standard, 500ml/bottle, NIST Traceable with Certificate of Analysis, 1000ppm	2	
136	Sulfate Standard NIST Traceable, 500 mL/bottle (1000ppm)	1	
137	NIST Traceable Nitrate (NO ₃), 500 ml/bottle (1000ppm)	1	
	Note:		
	Analytical Reagent (Powdered) included Delivery Charge		
	Acids Reagents included Delivery Charge		
	Solvents Reagent included Delivery Charge		
	Microbiology Reagents included Delivery Charge		
	SWRRD LFP NSHP 2024-01-0052		
138	NIST Traceable - AAS Standard -Sodium 500 mL (1000ppm) - at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
139	NIST Traceable - AAS Standard -Zinc 500 mL (1000ppm) - at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
140	NIST Traceable - AAS Standard -Manganese 500 mL (1000ppm) - at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
141	NIST Traceable - AAS Standard -Phosphorus 500 mL (1000ppm) - at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
142	SRM 136f - Potassium Dichromate (Oxidimetric Standard), 60g, NIST Traceable, with certificate of analysis and ISO 17034 accreditation of reference material producers	1	
143	Nitric Acid, AR, 2.5L/bottle ≥68%, staggered delivery Statutory Requirements: Must have PNP permit to purchase or equivalent	8	
144	Sulfuric Acid AR 98 % 2.5 L	8	
145	Hydrogen Peroxide, AR, 30-50%, 500ml/bottle - at least 1 year expiration date from date of delivery with certificate of analysis, safety data sheet, and expiry date/shelf life	1	
146	Hydrochloric Acid 37 % 2.5 L - at least 1 year expiration date from date of delivery	4	

	with certificate of analysis, safety data sheet, and expiry date/shelf life		
147	Ethanol, technical grade, 95%, 20L/ carboy	2	
148	Lanthanum Oxide, AR, Powder, 500g	1	
149	Cesium Chloride, 99.9 % 25 grams	1	
	SWRRD PHILREC SOIL 2024-01-0049		
150	Ferrous Sulfate Heptahydrate, ACS reagent, ≥99%, 250g/bottle	5	
151	Activated Charcoal, AR, Phosphate free, 1kg/bottle	2	
152	Sulfuric Acid (AR, 98%Concentrated 2.5L/bottle)	4	
153	Gum Acacia,99% AR, 500 g/bottle	1	
154	Barium Chloride Dihydrate, AR, 500g/btl	1	
155	Potassium Dichromate,99% AR, 500 g/bottle	4	
156	Potassium Sulfate, AR, 500 g/bottle	1	
	SWRRD RD CFBW 2024-01-0062		
157	Orthophosphoric Acid AR Grade; Liquid; Odorless; Completely Miscible; 1.685 g/cm ³ density; >85% Purity), 2.5L/bottle	2	
158	Ethanol, technical grade, 95%, 20L/ carboy	4	
159	Phenolphthalein, AR, 500g/bottle	1	
160	Bromocresol green, AR, 5g/bottle	1	
161	pH Buffer Solution (NIST Traceable pH Buffer Solution with COA -pH 4.00 (colored buffer solution): 1L)	1	
162	pH Buffer Solution(NIST Traceable pH Buffer Solution with COA -pH 7.00 (colored buffer solution): 1L)	1	
163	pH Buffer Solution(NIST Traceable pH Buffer Solution with COA -pH 10.00 (colored buffer solution): 1L)	1	
	Compliance with Section VI. Schedule of Requirements		

Lot 2- Supply and Delivery of various Laboratory Supplies

Item No.	Item Description	Quantity	Statement of Compliance
	Supply and Delivery of various laboratory supplies		
	LSD PD 1435 2024-01-0046		
1	High-density polyethylene (HDPE) Canister/Container, screw cap Capacity: 500 mL, opaque, color white	1000	
2	Plastic Erlenmeyer Flask 250 mL, PE Plastic, graduated, With Calibration certificate	100	
3	Plastic Funnel 40 mm, Stem Dia: 6 mm, Stem Length 20 mm	50	
4	Filter Paper Filter Paper #42, 125mm dia, ashless 100circles/box	20	
	LSD NSHP 2024-01-0046		
5	Lint-free wipes, 11.0 x 21.3 cm, 280 pieces, 1 ply, white, Material: Cellulose	40	
6	Filter paper Grade: 42 Ashless: ≤0.007% Size: 90 mm, Pack size: 100 circles, Filter Media: Cellulose	20	
7	Borosilicate test tubes, 15 mL (16x125 mm), Pack: 72 -pcs	1	
8	Graduated Cylinder, 1000ml, Made of Type 1 Borosilicate glass; Class A Graduation with certification	30	
9	Test tube brush, Nylon, 27 cm	10	
10	Test tube brush, Nylon, 23 cm	10	
11	Test tube brush, Nylon, 18 cm	10	
12	Filtering flask Capacity: 500mL Material: Borosilicate glass code 7740 Flask Style: Filtering Neck Style: Narrow Mouth Rubber Stopper No.: 7 Height: 184mm Autoclavable: Yes	10	
13	Parafilm M, film W × L 100 mm × 38 m	15	
14	Filter paper, No. 2 or equivalent, 100 pcs/box	20	
15	Scrub Suit, Hi-Vis Unisex, Microfiber Water Repellant, Mint Green Color (Sizes: 2 Medium, 1 L; 2XL)	5	
16	Test Tube Bottle Nylon Washing Brush Tool, White, 10mm diameter, 8 x 1cm / 3.1" x 0.4"	10	
17	Bottle Brush Cleaner, Long Tube Cleaning Brush (15.5" x 1")	10	
18	Bottle Brush Cleaner, Long Straw Cleaning Brush (12.9" x 0.4")	10	
19	Glassware Liquid Cleaner, Liquid, alkaline and phosphate-free concentrate Volume: 5 Liters Sequestering agent content (alkalimetric): 8.5-10% Density: 1.05-1.09 Free alkali (as NaOH): 1.5-2.5%	10	

	Phosphate: $\leq 0.002\%$ Inclusions: Safety Data Sheet (SDS), Certificate of Analysis (CoA)		
20	Lab Folding Cart (Folding cart, Stable, with 2 layers, multi-use trolley with parking brake, Easy to fold away and store, can carry 60 kg or better, at least 1 meter height. (with demo unit))	3	
21	Laboratory Tray (Dim: 46 x 14 x 2; easy cleaning; Uniform 3/16" heavy wall construction for added rigidity; Standard color natural black or white)	5	
22	Pipette Tips (universal fits all brands of pipettor, 2-20 μ L vol. cap., reusable; 1000pcs/pk)	5	
23	Pipette Tips (universal fits all brands of pipettor, 1-5 mL vol. cap., reusable; 1000pcs/set)	5	
24	Pipette Tips (universal fits all brands of pipettor, 1-10 mL vol. cap., disposable; 1000pcs/pk)	5	
25	Pipette Tip Rack (fits all 100-1000uL pipette tips, 1000pcs/pack)	3	
26	Tissue, Giant Roll Paper Tissue, 3ply, 225 x 214mm, 75pulls / 150sheets; 6 rolls/pack	20	
27	Ice box (chest Insulated cooler, 45 liters with side handles)	2	
28	Face mask, Non-woven disposable face mask, with ear loop and tie on, about 2-4ply 50's/box	50	
29	Funnel, Polypropylene, Dia: 100mm, Stem Dia: 11 mm, Stem Length 90 mm	20	
30	Funnel Stand, Wooden, ≥ 4 holes per stand, funnel cap: 125ml-250ml, hole dia: 50mm, height: adjustable upto 320mm	10	
31	Aluminum disk for moisture analysis, with cover, 50 x 23, 50pcs/pack	5	
32	Filter Cartridge, OV/P100, 8pcs per box	5	
33	Safety Goggle (black, white, unisex, polycarbonate)	4	
34	Absorbent for Spilled Liquids, 500g/pack	15	
35	Magnetic Stir Bar (3-6mm x 10mm)	3	
36	Glass Funnel Dia: 40mm, Stem Dia: 6mm: Stem Length, 40mm	20	
37	Glass, Funnel Dia: 80mm, Stem Dia: 6mm: Stem Length, 40mm	20	
38	Laboratory Shoes, White (size, 6-14)	20	
39	Digestion Tube, Standard Straight Digestion Tube, 100-150ml	20	
40	Digestion Tube, Standard Straight Digestion Tube, 200-250ml	20	
41	HDPE Carboy Square Bottle for waste storage, 5 Gal/20L capacity, white	30	
	STK Laboratory Supplies		
42	Solution bottles, opaque, squeezable, 60 ml, screw cap, with printed label No background color Text: DISTILLED WATER Text color: Black	1000	
43	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: CPR; Font Color: Black;	1000	
44	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: BTB; Font Color: Black	1000	

45	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: BCG; Font Color: Black	1000	
46	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: N (Nitrogen); Font Color: Black;	1000	
47	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: P (Phosphorus); Font Color: Black;	1000	
48	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: K (Potassium); Font Color: Black	1000	
49	Solution bottles, opaque, squeezable, 30 ml, screw cap with printed label Text: K2 (Potassium 2); Font Color: Black	1000	
50	Solution bottles, opaque, squeezable, 15 ml, screw cap with printed label No background color Text: K1 (Potassium 1); Font Color: Black;	1000	
51	Solution bottles, opaque, squeezable, 15 ml, screw cap with printed label No background color Text: P1 (Phosphorus 1); Font Color: Black;	1000	
52	Test tube (13mmx100mm, 100's/box)	250	
53	Delicate task wipers, absorbent lint-free wipes, Anti stat polyshield, 280 sheets/box padouble check in size,	20	
54	Plastic tray, 35x45 cm	20	
55	KN95 Dust Mask, 50 pcs/box	10	
56	Glass pipette, 10 mL, class AS with Calibration Certificate	6	
57	Glass pipette, 5 mL, class AS with Calibration Certificate	6	
58	Glass pipette, 2 mL, class AS with Calibration Certificate	6	
59	Graduated cylinder, 100 mL, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	2	
60	Graduated cylinder, 50 mL, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	3	
61	Graduated cylinder, 25 mL, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	3	
62	Volumetric Flasks, 2000 mL, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	10	
63	Magnetic Stir Bar, PTFE, 30-35 mm, cylindrical	10	
64	Bottle top dispenser, 10-100 mL, Laboratory Grade; Acid and Alkali Resistance; Double Valve (Safety Valve) to avoid the waste of solution; Equipped with multiple screw adapters, suitable for most reagent bottles	3	
65	Bottle top dispenser, 5-50 mL, Laboratory Grade; Acid and Alkali Resistance; Double Valve (Safety Valve) to avoid the waste of solution; Equipped with multiple screw adapters, suitable for most reagent bottles	3	
66	Aspirator, rubber	5	
67	Half Facepiece Reusable Respirator, Medium	4	
68	Half Facepiece Reusable Respirator, Small	4	
69	Muti acid gas/organic vapor cartridge, 1 pair/pack	12	
70	Glass stirring rod, 7x300 mm	10	

71	Reagent bottle, 1000 mL, amber, with screwcap	5	
72	Reagent bottle, 2000 mL, amber, with screwcap	5	
73	Beaker, 2000 mL, plastic	8	
74	Beaker, 1000 mL, borosilicate	6	
75	Laboratory spoon/spatula	10	
76	Rubber mallet, head diameter: 60 mm, wooden handle	6	
77	Mortar and pestle, porcelain, 130 mL	5	
78	Magnetic Retriever Rod, PTFE, 450 mm x 10 mm	5	
79	Aluminum tray, rectangular, 14"x18"	100	
80	Ethyl Alcohol, 70% solution, 500 ml/bottle	100	
	Water Test Kit Laboratory Supplies		
81	pH Strips, with color scale, graduations and accuracy, 1pH unit, pH range: 1-10, 4.8m/roll	15	
82	Ice box, chest insulated cooler, 45L capacity, with side handles	2	
83	Laboratory Gloves, Nitrile, 100's/box, Small	10	
84	Laboratory Gloves, Nitrile, 100's/box, Medium	30	
85	Laboratory Gloves, Nitrile, 100's/box, Large	30	
86	Test tube, 20ml, 16x150mm, glass, 100pcs/box	10	
87	Graduated plastic Pasteur pipette. Disposable, 3mL, 500pcs/pack	2	
88	Solution Bottles, Polyethylene Bottle, Opaque, Squeezable, 100mL	200	
89	Solution Bottles, Polyethylene Bottle, Opaque, Squeezable, 60mL	200	
90	Solution Bottles, Polyethylene, Opaque, Squeezable, 30mL	200	
91	Solution Bottles, Polyethylene, Opaque, Squeezable, 80mL	200	
92	Solution Bottles, Amber Bottle with shatter proof plastic coating, 100mL (e.g. PVC and/ or bubble wrap).	200	
93	PET Bottles, w/ lid, wide mouth, clear, 50 mL capacity, 25pcs/pack	2	
94	Filter Paper, No. 1, ashless, 125mm, 100 circles/box	14	
95	Half Mask Respirator, medium	2	
96	Filter Cartridge OV/P100 8pcs/bx	2	
97	Pipette tips, 1 - 10 ml, 100pcs/box, universal pipette tips	2	
98	Pipette tips, 1 ml - 5 ml, 100pcs/box, universal pipette tips	2	
99	Pipette tips, 100 ul - 1000 ul, 100pcs/box, universal pipette tips	5	
100	Laboratory Goggles	20	
101	Wash Bottle, 500 mL, opaque color	10	
102	Filter paper, #42, ashless, diameter:90mm, 100 pcs/box	100	
103	2000 mL Beaker, borosilicate, type 1 with certificate	5	
	Microbiology Laboratory Supplies		
104	Bait Lamina Probes, Fabricated, 16-hole of 0.5cm diameter, PVC material	500	
105	Interfolded Tissue paper, 125 pulls	50	
106	Polypropylene bags, 12x18 Polypropylene autoclavable bags, 0.018 thick (approx 100pcs/pack)	20	

107	Pipette tips, 10ml, 100pcs/box, universal pipette tips	10	
108	Pipette tips, 5ml, 100pcs/box	10	
109	Sterilized cotton swab, Box	3	
110	Filter paper, No. 2 or equivalent, 100 pcs/box	3	
111	Filter paper, N-free filter paper, 90mm, 100pcs/box	4	
112	Media bottles, 1L, Borosilicate Media Bottles with cap	3	
113	Media bottles, 100ml, Borosilicate Media Bottles with cap	2	
114	Beaker, Borosilicate glass, 1L	2	
115	Beaker, 2000L, HDPE	5	
116	Spatula, White, Heavy duty Silicone, 11", Heat Resistant	8	
117	Glass Petri Dishes, Borosilicate Glass, Round, Flat, clear dishes with beaded edges withstand repeated sterilization (wet or dry), 100mm diameter, 15mm height	100	
118	Erlenmeyer flask, 125ml, Made of Type 1 Borosilicate glass with rubber stopper	10	
119	Erlenmeyer flask, 50ml, Made of Type 1 Borosilicate glass with No. 2 rubber stopper	10	
120	Funnel, Polypropylene, Dia: 100mm, Stem Dia: 11 mm, Stem Length 90 mm	10	
121	Funnel, Glass, Funnel Dia: 90 mm, Stem Dia: 10 mm, Stem Length 90 mm	10	
122	Volumetric flask, 100ml, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	5	
123	Volumetric flask, 500ml, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	5	
124	Volumetric flask, 1000ml, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	5	
125	Volumetric flask, 2000ml, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	5	
126	Volumetric flask, 250ml, Made of Type 1 Borosilicate glass; Class A Graduation with Calibration Certificate	5	
127	Amber bottles, 60ml	2	
128	Amber bottles, 500ml	1	
129	Amber bottles, 120ml	2	
130	Reagent bottle, Polypropylene, 1L	7	
131	Reagent bottle, Polypropylene, 500ml	6	
132	Reagent bottle, Polypropylene, 250ml	2	
133	Reagent bottle, Polypropylene, 100ml	2	
134	Resealable plastic bag, #8, at most 170mm x 240mm, 100pcs/pack	5	
135	Resealable plastic bag, #8, at most 120mm x 1700mm, 100pcs/pack	5	
136	Petri plate canister, stainless steel, with removable rack and stainless lid, at least 10.8cm x 22.8 cm	10	
	SWRRD RD CFBW 2024-01-0062		
137	Glassware Liquid Cleaner, Liquid, alkaline and phosphate-free concentrate Volume: 5 Liters Sequestering agent content (alkalimetric): 8.5-10% Density: 1.05-1.09 Free alkali (as NaOH): 1.5-2.5% Phosphate: ≤ 0.002% Inclusions: Safety Data Sheet (SDS), Certificate of Analysis (CoA)	1	

138	Concentrated Liquid Detergent, 5L	6	
139	Rectangular Secondary Containment Basin -Lab Tray made with high density polyethylene -EPA Compliant Secondary Containment for Bottles and Containers -Containment Capacity : not less than 15 L -Dimension: approx. 15 x 17 x 3" (WxLxH)	5	
140	Chemical Absorbent Pads '100 pads/pack 'Size: approx 50cm x 40cm '100% polypropylene 'Absorbency meets or exceeds industry standards. 'Color: Yellow pad 'With dispenser box	1	
141	Glass Volumetric pipette, 20ml, class AS, with Calibration Certificate/Batch Calibration from Manufacturer upon delivery	8	
142	Glass Volumetric pipette, 25ml, class AS, with Calibration Certificate/Batch Calibration from Manufacturer upon delivery	5	
143	Volumetric flask, 2000ml, Made of Type 1 Borosilicate glass; polyethylene snap caps; Class A Graduation, (with Calibration Certificate/Batch Calibration from Manufacturer upon delivery)	3	
144	Pipette Tip Rack (fits all 100-1000uL pipette tips, 25pcs/rack capacity. 4 racks/box) check available unit in the laboratory	2	
145	Pipette Tip Rack (fits all 1-5000uL pipette tips, 25pcs/rack capacity. 4 racks/box) check available unit in the laboratory	2	
146	Pipette tips with rack, 10ml capacity, 24pcs/box check available unit in the laboratory	2	
147	Pipette Tips (universal fits all brands of pipettor, 2-10 mL vol. cap., disposable; 200pcs/pk) check available unit in the laboratory	5	
148	Digital Thermohygrometer -Min/Max memory, memory clear, °F/°C switchable, 12/24-hour clock -At the touch of a button, memory recalls the highest and lowest temperature and humidity readings -0.01% accuracy Humidity Range: 20 to 90% RH Resolution: 1% RH Accuracy: ±5% RH mid-range to ±8% RH elsewhere Ambient Temperature Range: 32 to 122°F (0 to 50°C) Resolution: 0.1 % Accuracy: ±1°C Timing Capacity: 12/24 hrs Resolution: 1 minute	1	
149	Glass pH combination Electrode Material: Lead free Glass with Built-in Temperature Compensation Sensor: Junction: Ceramic Reference: Long-Life Electrolyte: 3M KCL Length: 120mm Diameter: 12mm	3	

	Membrane Shape:cylindrical Membrane Resistance: <150MΩ Range: 0 to 14 pH Temp. Range: -5 to 100°C (23 to 212°F) Connector: BNC		
150	Half-Mask respirator, Assigned Protection Factor:10, Compatible with Air System SA Series, Recommended application: Ford Chemical Testing (Small - Large)	9	
151	Nitrile gloves, powder free, 100's/box Small	16	
152	Nitrile gloves, powder free, 100's/box medium	16	
153	Nitrile gloves, powder free, 100's/box Large	16	
154	Interfolded Tissue Paper, 175 sheets	300	
155	Laboratory footwear rubber open heels, white feature: slip resistant, incredibly light, water-friendly and buoyant; ventilation ports add breathability and help shed water and debris, easy to clean and quick to dry, pivoting heel straps for a more secure fit Enclosed toe design and thicker metatarsal area to help protect the feet from spills. Protection from hazardous chemicals Sole material: rubber Outer Material:Ethylene Vinyl Acetate (EVA) size will be measured by the bidder to the actual size of laboratory personnel.	10	
156	Conical centrifuge tube, 50 mL 50 pcs/pack	7	
157	Automatic burettes, borosilicate glass 3.3, class AS, amber Supplied with an automatic zeroing system, VALVE stopcock and also an intermediate PTFE stopcock to recirculate the residual liquid.	2	
	SWRRD RD REG 2024-01-0051		
158	Perforated disc for soil analysis Inner diameter: 4.9cm Outer diameter: 5.1cm Sieve Diameter: 4.8cm holes Diameter: 0.2cm Height: 2.3cm Top: 2.3cm Bottom: 1cm Material: brass	21	
159	Laboratory push cart, 80x50*75 cm, Two layer cart Stainless Wear-resistant and non-skid wheels 4 wheels, 2 swivel wheels	2	
160	Digestion Tube, Clear, 100 ml capacity, straight-sided	10	
	SWRRD PHILREC SOIL 2024-01-0049		
161	Parafilm, 4"x125 ft/roll	4	
162	Aspirator bulb Tapered silicone seal provides airtight fit in all pipet sizes	6	
163	Test Tube Brush Small Nylon bristle, galvanized wires, with tied tip	20	

164	Test Tube Brush medium Nylon bristle, galvanized wires, with tied tip	20	
165	Test Tube Brush Big Nylon bristle, galvanized wires, with tied tip	20	
166	Utility mesh/basket tray, good quality plastic, L:8-12in x W: 10- 15in x H: 3-5in, Color: black, white or gray, uniform	10	
167	4 wheel folding platform cart Measurements: L 49 x W 74 x H 17 cm Foldable handrail Wear-resistant and non-skid wheels 4 wheels, 2 swivel wheels Metal coated	2	
168	Weighing boat, 2x2 inches, 100/pack, PP	1	
169	Weighing Boat, 25 mL capacity, Diamond-shaped weigh boats, 100/pack	1	
170	Weighing Boat, 100g capacity, 100/pack	1	
171	Digestion Tube, Clear, 100 ml capacity, straight-sided	10	
172	Perforated disc for soil analysis Inner diameter: 4.9cm Outer diameter: 5.1cm Sieve Diameter: 4.8cm holes Diameter: 0.2cm Height: 2.3cm Top: 2.3cm Bottom: 1cm Material: brass	10	
	Compliance with Section VI. Schedule of Requirements		