

UTHUKELA WATER
OPS2023-HH-035
TERMS OF REFERENCE & REQUEST FOR QUOTATIONS

1. Introduction:

UThukela Water Laboratory conducts water analysis for various types of water. It uses different types of chemicals (Listed in Annexure 1) to determine water quality, therefore we need to remove old/unused chemicals, empty containers of chemicals and solutions potentially containing Hazardous Biological Agents (water-borne pathogens and agents found in raw sewer), in our store rooms at intervals not exceeding 3 months/ or less as determined by accumulation of waste.

The Ngagane Water Treatment Plant and Biggarsberg Water Treatment Plant generate hazardous waste such as fluorescent tubes, empty bags of activated carbon, empty oil containers, other empty containers of flammables and contained spills. Estimated quantities shall be found in Annexure 2 at the end of this document. UThukela Water (Pty) Ltd intends to dispose of such waste at intervals not exceeding 3 months.

2. Background:

The services of an approved professional waste disposal contractor or hazardous waste transporter is required to collect and dispose all our various chemicals and empty containers once every 3 months for a period of 12 months. The collection and disposal of chemicals must in accordance with NEM:WA 59 of 2008. The collection sites are the Laboratory at KwaMathukuza in Newcastle, Ngagane Water Treatment Plant in Newcastle and Biggarsberg Water Treatment Plant in Dundee.

3. Specifications:

UThukela Water (Pty) Ltd shall classify and store its hazardous waste, earmarked for disposal, in accordance with SANS 10234. Waste shall be stored, according to the aforesaid classification, in labelled waste bins containing sealable bags filled with similar contents and marked accordingly.

The contractor shall be required to obtain the hazardous waste material as classified by UThukela Water (Pty) Ltd and transport it according to required and applicable standards (e.g. SANS 10228). Where contents require to be rearranged for transportation to the respective disposal sites, this shall be the responsibility of the contractor. Easy handling shall be facilitated by UThukela Water (Pty) Ltd through the use of leak-proof sealable bags, in conjunction with conspicuous labelling of the bags.

The successful hazardous waste transporter shall be required to submit documentation (such as disposal certificates) proving that the same quantities of waste that was received from our sites was disposed of in the correct and legal waste disposal site.

4. Requirements:

- Submit proof of prior similar work experience and years work experience.
- Submit proof that ensures such disposal shall be effected at a waste facility site duly licensed for such purpose, and, where so required undertakes to provide with an authorised waste manifest document to such effect. Certified copies of waste disposal sites' licence shall form part of the supporting documents for evaluation.
- Submit Project Plan addressing the collection, transportation, final disposal and documentation
- Submit an agreements between the waste transporter and the waste disposal sites permitting the waste transporter to dispose of waste in each of the respective sites.
- Submit proof that the waste disposal site complies with the legal obligations in respect of closure of the waste disposal site and shall rehabilitate and maintain the site in accordance with the final rehabilitation plan as approved by the Department of Water Affairs or any other competent authority.
- Submit the list of key personnel and proof of their competencies
- Submit proof of compliance with tax statutory obligation
- Submit proof of registration and good standing with the Compensation Commissioner in terms of COIDA
- Submit proof of SHEQ compliance as set out under item 8 of this document

Evaluation Criteria	Applicable values/points	Weight
Previous Relevant Experience of Vendor	<ul style="list-style-type: none"> • Number of similar collection and disposal of various chemicals projects completed 	20
Interpretation of Brief	<ul style="list-style-type: none"> • Understanding of the overall project • Full brief of how you intend to execute the project along with your understanding of the project must be provided 	20
Waste Disposal Site Licences	<ul style="list-style-type: none"> • Certified copy of the Licences to the Waste Disposal Sites 	20
Permits to Dispose	<ul style="list-style-type: none"> • A copy of agreements permitting the waste transporter to dispose of the pertinent/different categories of waste 	20
Expertise (staff allocated to this service by the vendor)	<ul style="list-style-type: none"> • Context (Similar / related work) (CV's of the relevant officials that you will appoint to consultant on this project must be provided) 	10
SHEQ Compliance	<ul style="list-style-type: none"> • Documented proof as spelled out in item 8 of this document 	10
Total		100

5. SCOPE OF WORK FOR COLLECTION AND DISPOSAL OF VARIOUS CHEMICALS

5.1. AVAILABILITY OF INFORMATION

The list of hazardous waste, estimated quantities are included in Annexures 1 and 2 of this document. Actual volumes and MSDS will be made available to the successful tenderer.

5.2. DELIVERABLES FOR ALL THREE SITES

The work to be undertaken in terms of The Regulation for Hazardous Chemicals Substances comprises the following:

- Rearrangement of waste, where required, in sealable bags for transportation into the respective disposal sites;
- Loading of waste
- Safe transportation of waste according to applicable laws, including the National Road Traffic Act
- Off-loading and disposal of waste in each waste disposal site legally licensed to accept and dispose of waste in each category
- Submission to UThukela Water (Pty) Ltd of waste disposal certificates
- The successful tenderer/ bidder and his professional team, must adhere to the Occupational Health and Safety Act specifications associated with Hazardous Chemical Substances Regulations (1995) at all times, during collection, transportation and disposal of waste.

6. Time Frame

The successful hazardous waste transporter will be required to collect waste at intervals not exceeding 3 months as determined by the accumulation of waste in all the aforementioned sites of UThukela Water (Pty) Ltd. The duration of the contract shall be 12 months.

7. Quotation structure:

Please provide a price quotation (**itemised**) to Collect and Dispose Various Hazardous Waste.

1. The price quoted is to include the following work:

ITEM	DESCRIPTION	UNIT	RATE	AMOUNT (R)
	Consultancy Services			
A-1	Collection of Waste (1 trip)	Sum	-	
A-2	Disposal of Waste (once)	Sum	-	
	Sub-Total			
	VAT (15%)			
	TOTAL (VAT INCLUDED)			

8. SHEQ Compliance

The tenderer is required to submit the following with the quote in respect of waste listed in Annexures 1 and 2:

- Health and Safety Plan addressing both the on-site and off-site handling of hazardous waste
- Cradle-to-the-Grave Disposal Plan
- Emergency Plan addressing both handling and transportation
- Proof of competency and licensing of drivers to transport hazardous material
- Proof of vehicle licensing to transport hazardous material

9. Price Tendered:

- Tendered price must be submitted as per supplied specifications (Table above) and submit the back-up documentation as per the specification for the equipment quoted.

For any queries, please contact:

Please contact: Mrs. H Hickley, Telephone number: 034 3285000 or
E-mail address: hannelie.hickley@uthukelawater.co.za

The service provider are required to submit the following documents for their speciality as per the above description.

1. Quotation
2. MBD 4 attached.
3. MBD 9 attached.
4. CSD Summary reports
5. Tax clearance certificate.
6. Company registration Certificate
7. BBBEE Certificate

- Bids will be adjudicated in terms of the Preferential Procurement Regulation, 2022 pertaining to Preferential Procurement Policy Framework Act, 5/2000, UTW SCM Policy and other applicable legislations, and will be based on 80/20 points system. Preference points will be awarded to service providers using their B-BBEE status level of contribution.
- The municipal Entity reserves a right to accept all, some or none of the bids submitted, either wholly or in part and is not obliged to accept the lowest bid.
- National Treasury General Conditions of the contracts are applicable.

All the above documents must be submitted via email to quotes@uthukelawater.co.za for attention of SCM Manager no later than **14th April 2023**.

Email subject OPS2023-HH-035

All potential service providers are encouraged to register on uThukela Water (PTY) Ltd database, please ignore if registered.

ANNEXURE1

No:	CHEMICAL NAME	VOLUME	QTY	MSDS	SAMPLE
AAS Room					
1	COD STD Soln	200 mℓ	4	Yes	Liq
2	Potassium Iodide	500 g	9	Yes	Pwd
3	Sodium Oxalate	250 g	1	Yes	Pwd
4	Ammonium Oxalate	250 g	2	Yes	Pwd
5	Sodium Azide	100 g	1	Yes	Pwd
6	Manganese Sulphate	500 g	4	Yes	Pwd
7	Calcium Chloride Anhydrous	500 g	2	Yes	Pwd
8	Sodium thiosulfate Pentahydrate	500 g	2	Yes	Pwd
9	Sodium tetraborate 10-hydrate buffer	500 g	1	Yes	Pwd
10	Zinc Nitrate 4 hydrate GR	1 kg	1	Yes	Pwd
11	Zinc Sulphate 7 hydrate GR	500 g	1	Yes	Pwd
12	Purified Sulphur	1 kg	1	Yes	Pwd
13	Sodium Thiosulphate 5 hydrate	250 g	1	Yes	Pwd
14	Zinc Oxide	500 g	1	Yes	Pwd
15	Tris (hydroxymethyl) aminomethan	500 g	2	Yes	Pwd
16	Starch Soluble CP	500 g	4	Yes	Pwd
17	Sodium Thiosulphate Solution	1 L	1	Yes	Liq
18	Copper Sulphate	1 kg	1	Yes	Pwd
34	Empty Chloroform bottle	2.5 L	1	No	Liq
35	Empty Alkaline Cyanide Reagent	100 mℓ	1	No	Liq
External Store Room No.1					
36	Gram Color	500 mℓ	5	Yes	Liq
37	Hydroxylammonium Chloride	250 g	1	Yes	Pwd
38	Alcohol 95 %	500 mℓ	1	Yes	Liq

39	Liquid Parafin BP	200 mℓ	1	Yes	Liq
40	Methanolic Iodine 0.1 M	500 mℓ	1	Yes	Liq
41	Iso-Propyl Alcohol	500 mℓ	1	Yes	Liq
42	COD Solution B	500 mℓ	6	Yes	Liq
43	BDH 4-5 Indicator	500 mℓ	1	Yes	Liq
44	Acetic anhydride GR	500 g	1	Yes	Pwd
45	Phenoldisulphonic Acid Solution 25%	500 mℓ	1	Yes	Liq
46	Trietanolamina pa	1 L	1	Yes	Liq
47	Silver Nitrate	2.5 L	1	Yes	Liq
48	Propan-1-ol	2.5 L	1	Yes	Liq
49	EDTA Solution	2.5 L	5	Yes	Liq
50	Ammonium Hydroxide	500 mℓ	1	Yes	Liq
51	Silicon Oil	2.5 L	1	Yes	Liq
52	1,1,1 Trichloroethane	2.5 L	1	Yes	Liq
54	Chloride	2.5 L	1	Yes	Liq
55	Benzene GR	2.5 L	1	Yes	Liq
56	Acetic Acid Glacial	2.5 L	1	Yes	Liq
57	Carbon Tetrachlorde	2.5 L	2	Yes	Liq
58	Xylene (Sulphur free)	2.5 L	1	Yes	Liq
59	Ethanol Absolute	2.5 L	1	Yes	Liq
60	Hydrochloric Acid	2.5L	3	Yes	Liq
61	Petroleum Ether	2.5 L	1	Yes	Liq
62	Aluminium Sulphate crystals	500 g	1	Yes	Liq
63	Iodine	500 g	2	Yes	Liq
64	Lead Oxide	250 g	5	Yes	Liq
65	Magnesium Sulphate	500 g	2	Yes	Pwd
66	Boric Acid	500 g	1	Yes	Pwd
67	Potassium Chloride	500 g	2	Yes	Pwd
68	Brilliant Green Bile 2% Broth	500 g	1	Yes	Pwd
69	Endo Agar Les	500 g	1	Yes	Pwd
70	Nutrient Agar	500 g	1	Yes	Pwd
71	M-Fc Agar	500 g	1	Yes	Pwd
72	Pelintest (AZ Fluoride Tablets)	250 g	2	Yes	Pwd
73	Sodium Hydroxide Solution 5.0N	50 mℓ	2	Yes	Liq
74	Sodium Hydrogen Carbonate	500 g	3	Yes	Pwd
75	UniAR Hexamine	500 g	1	Yes	Pwd
76	Potassium Dichromate AR	500 g	9	Yes	Pwd
77	Disodium Hydrogen orthophosphate anhydrous AR	500 g	1	Yes	Pwd
78	Sodium Sulphite	500 g	1	Yes	Pwd
79	Buffer Solution pH 9	500 mℓ	1	Yes	Liq
80	Silver Sulphate	500 g	2	Yes	Pwd
81	Silver Nitrate	500 g	4	Yes	Pwd
82	Ferro in Solution	100 mℓ	1	Yes	Liq
83	Dipotassium hydrophosphate 3-hydrate	500 g	1	Yes	Pwd

	GR				
84	Potassium Permanganate	500 g	4	Yes	Pwd
Internal Store Room No.1					
85	Potassium Chloride Solution 3M	500 mℓ	5	Yes	Liq
86	Sodium Hydroxide Pellets	500 g	19	Yes	Pwd
87	Plate Count Agar	500 g	2	Yes	Pwd
88	m-Endo Agar Les	500 g	1	Yes	Pwd
89	XLD Agar	500 g	1	Yes	Pwd
90	Ammonia Solution 25%	2.5 L	2	Yes	Liq
91	COD Reagent Vials box	10 mℓ	23	Yes	Liq
92	Sodium Chloride for irrigation 0.9%	1 L	3	Yes	Liq
93	Stabilized Formazin Turbidity STD	500 mℓ	15	Yes	Liq
94	Resorcinol	500 g	1	Yes	Pwd
95	Ecoli-coliform chromogenic Medium	500 g	2	Yes	Pwd

No:	CHEMICAL NAME	VOLUME	QTY	MSDS	SAMPLE
External Store Room No.2					
96	Copper (II) Nitrate Cryst .pure	500 g	1	Yes	Pwd
97	Buffer Powder Pillows Citrate type 4	1000 g	1	Yes	Pwd
98	Magnesium Chloride	500 g	2	Yes	Pwd
99	Plaster of Paris	500 g	1	Yes	Pwd
100	Lead Acetate	500 g	1	Yes	Pwd
101	Sodium Nitrate GR	500 g	2	Yes	Pwd
102	Sodium Chloride	500 g	8	Yes	Pwd
103	Macconkey Agar without Crystal Violet	500 g	2	Yes	Pwd
104	Sodium Nitrite	500 g	1	Yes	Pwd
105	Sodium hydrogen phosphate 2-hydrate GR	500 g	1	Yes	Pwd
106	Cobaltous Chloride	50 g	1	Yes	Pwd
107	Total Chlorine PP DPD	100/pk	4	Yes	Pwd
108	Potassium Hydrogen Phthalate	500 g	4	Yes	Pwd
109	Phenol ZA ACS	250 g	1	Yes	Pwd
110	Ammonium Peroxodisulfate GR	500 g	1	Yes	Pwd
111	Copper Podwer	250 g	3	Yes	Pwd
112	Cadmium Nitrate 4-hydrate gr	250 g	1	Yes	Pwd
113	4-(N,N-Dimethylamino benzaldehyde	100 g	2	Yes	Pwd
114	Aluminium Ammonium Sulphate	200 g	1	Yes	Pwd
115	Potassium Antimony (III) oxide tartrate pure	250 g	1	Yes	Pwd
116	Di-Boron trioxide anhydrous fine granular	250 g	1	Yes	Pwd
117	Ethylenediaminetetra-Acetic acid dimagnesium salt	100 g	1	Yes	Pwd

118	Ascorbic Acid vitamin C	100 g	1	Yes	Pwd
119	4-Aminophenazone	25 g	4	Yes	Pwd
120	4-Amino-3-hydroxynaphthalene-1-sulphonic acid	25 g	1	Yes	Pwd
121	Lanthanum nitrate hexahydrate gr	100 g	2	Yes	Pwd
122	Cobalt Chloride crystal	100 g	1	Yes	Pwd
123	Nutrient Broth tablets	100/pk	1	Yes	Pwd
124	Ammonium monovanadate gr	250 g	1	Yes	Pwd
125	Sodium metabisulphite	500 g	1	Yes	Pwd
126	Copper (II) Sulphate	500 g	1	Yes	Pwd
127	Citric acid-1-hydrate	500 g	1	Yes	Pwd
128	Sodium Azide	100 g	2	Yes	Pwd
129	Nickel (II) Nitrate gr	250 g	1	Yes	Pwd
130	Di-Sodium hydrogen phosphate 12-hydrate gr	500 g	1	Yes	Pwd
131	Sodium sulfide hydrate	500 g	3	Yes	Pwd
132	N,N-dimethyl-p-phenylene-diamine sulphate	25 g	1	Yes	Pwd
133	Trans-1,2-diaminocyclohexane-N,N-tetra acetic acid(CDTA)	25 g	2	Yes	Pwd
134	Rochelle salt solution	25 mℓ	1	Yes	Liq
135	Polyvinyl alcohol dispersing agent	50 mℓ	2	Yes	Liq
136	Sodium carbonate anhydrous gr	500 g	3	Yes	Pwd
137	Di-sodium tartrate dihydrate gr	100 g	1	Yes	Pwd
138	Nickel Sulphate	1 Kg	1	Yes	Pwd
139	Nessler reagent	500 mℓ	1	Yes	Liq
140	Ammonium Chloride crystals	500 g	4	Yes	Pwd
141	Ammonium iron(II) sulfate gr	500 g	4	Yes	Pwd
142	Mercuric Sulphate	500 g	1	Yes	Pwd
143	Sodium Acetate anhydrous	500 g	1	Yes	Pwd
144	Phenol	500 g	3	Yes	Pwd
145	Rust Suspension	15 mℓ	1	Yes	Liq
146	Hexamethylene tetraamine gr	500 g	1	Yes	Pwd
147	Calciumsulfat-2-hydrat	500 g	1	Yes	Pwd
148	Activated Carbon	2 kg	1	Yes	Pwd
149	Ox Bile	500 g	1	Yes	Pwd
150	Ammonium Sulphate AR	500 g	3	Yes	Pwd
151	Potassium Bromide	500 g	1	Yes	Pwd
152	Sulfanic Acid GR	500 g	2	Yes	Pwd
153	Oxylic Acid CP	500 g	1	Yes	Pwd
154	Di-potassium hydrogen orthophosphate	500 g	2	Yes	Pwd
155	Stannous Chloride Solution APHA	250 mℓ	1	Yes	Liq
156	KCL 3.5 M	50 mℓ	1	Yes	Liq

No:	CHEMICAL NAME	VOLUME	QTY	MSDS	SAMPLE
External Store Room No.3					
157	Ethanol rectified 96 %	3 L	3	Yes	Liq
158	EDTA STD Soln	3 L	1	Yes	Liq
159	Acetic Acid Glacial Soln	3 L	2	Yes	Liq
160	Ammoniumeisensulfat-6-hydrat	500 g	1	Yes	Pwd
161	COD MR Reagent 25 vials	10 mℓ	125	Yes	Liq
162	Sodium Cyanide AR	500 g	1	Yes	Pwd
163	m-Endo Agar Les	500 g	1	Yes	Pwd
164	m-FC Agar	500 g	1	Yes	Pwd
165	Agar Bacteriological	500 g	2	Yes	Pwd
166	FAD Fluoride Analysis Diluent Soln	5 L	1	Yes	Liq
167	Kovacs Indou reagent Soln	500 mℓ	1	Yes	Liq
168	Hydrogen Peroxide	500 mℓ	1	Yes	Liq
169	Dnase Agar	100 g	1	Yes	Pwd
170	Fluoride Pan STD	500 mℓ	1	Yes	Liq
171	Cuver (1 Copper Reagent) Powder Pillow	0.75 g	300	Yes	Pwd
172	Bromophenol Blue Indicator PP	0.75 g	300	Yes	Pwd
173	CDTA disodium magnesium salt PP	0.75 g	100	Yes	Pwd
174	ChromaVer 3 Chromium reagent PP	0.75 g	200	Yes	Pwd
175	BariVer 4 Barium reagent PP	0.75 g	100	Yes	Pwd
176	NitraVer 6 Nitrate reagent PP	0.75 g	100	Yes	Pwd
177	High Range Manganese reagent set	0.75 g	200	Yes	Pwd
178	COD Solution	500 mℓ	15	Yes	Liq
179	Nitric Acid Soln 6N	2.5 L	4	Yes	Liq
180	Sodium Tetrasobate	2.5 L	1	Yes	Liq
181	Salpetersauer 65%	2.5 L	3	Yes	Liq
182	Orthophosphoric acid Soln	2.5 L	9	Yes	Liq
183	Kalium hexacyanoferrat (II)	250 g	1	Yes	Pwd
184	Devarda's Alloy	250 g	3	Yes	Pwd
185	Ethylenediaminetetraace	500 g	1	Yes	Pwd
186	Manganous Sulfate tetrahydrate	500 g	3	Yes	Pwd
187	Kaliumaluminiumsulfate	1 kg	1	Yes	Pwd
188	Chrome Alum	500 g	1	Yes	Pwd
189	Ammonium Molbdate	500 g	2	Yes	Pwd
190	Ammonium Nitrate	500 g	1	Yes	Pwd
191	Sodium Iodide	500 g	1	Yes	Pwd
192	Methylenediaminetetra-acetic acid disodium	500 g	1	Yes	Pwd

193	Aluminium Sulfate	1 kg	1	Yes	Pwd
194	Natriumdisulfit	500 g	1	Yes	Pwd
195	Di-Batrioxid wasserfrei feinkoring	250 g	1	Yes	Pwd
196	Magnesium Oxide light	250 g	7	Yes	Pwd
197	KCl CP	250 g	1	Yes	Pwd
198	8-Aminoaphthdene 2-sulphonic acid	250 g	1	Yes	Pwd
199	Kobalt (II)-chlorid-6-hydrat	500 g	1	Yes	Pwd
200	D-glucose	500 g	1	Yes	Pwd
201	Potassium nitrate	500 g	1	Yes	Pwd
202	Sodium hydroxide carbonate	500 g	3	Yes	Pwd
203	Enterococcus Seletive Agar	500 g	1	Yes	Pwd
204	Potassium Hydroxide Pellets	500 g	1	Yes	Pwd
205	Sodium Nitrate Technical	500 g	1	Yes	Pwd
206	Sodium Borate Decahydrate crystals	500 g	1	Yes	Pwd
207	Triathanolamin zur analyse Soln	250 mℓ	1	Yes	Liq
208	Sodium Hydroxide Solution 5.0 N	25 mℓ	1	Yes	Liq
209	Di-potassium peroxidisulphate	500 g	1	Yes	Pwd
210	Potassium dihydrogen orthophosphate	500 g	1	Yes	Pwd
211	Ferrous sulphate Pellets	500 g	1	Yes	Pwd
212	Hydroxylammoniumchlorid	1 kg	1	Yes	Pwd
213	Fixanal	1 L	1	Yes	Liq
214	Kaliumdichromatlosung	1 L	1	Yes	Liq
214	Sulphuric acid Std Soln 0.2N	2.5 L	3	Yes	Liq
215	Phenolphthalin	1000 mℓ	1	Yes	Liq
216	Sodium Hypochloride	500 mℓ	1	Yes	Liq
217	Ethyl Acetate	500 mℓ	1	Yes	Liq
218	Xylol	1 L	1	Yes	Liq
219	Potassium Nitrate Std Soln	1000 mℓ	1	Yes	Liq
220	Iso-ogylphenoxypolyethoxyethanol	1000 mℓ	1	Yes	Liq
221	Iso-propyl Alcohol	500 mℓ	1	Yes	Liq
222	AlizarinS	100 g	1	Yes	Liq
223	Peptine Bacteriological Agar	500 g	3	Yes	Pwd
224	Fluoracult	100 g	1	Yes	Pwd
225	Kaliumbromat	250 g	1	Yes	Pwd
226	Iodine ResublimeP	500 g	1	Yes	Pwd
227	Sodium Thiosulphate	500 g	1	Yes	Pwd
228	TitraVer Hardness reagent	100 g	1	Yes	Pwd
229	Violet Red Bile MUG Agar	70 g	1	Yes	Pwd
230	Deoxycholate Citrate Agar	500 g	1	Yes	Pwd
231	Cled Medium	500 g	1	Yes	Pwd
232	Trytone Soy Broth	500 g	1	Yes	Pwd
233	Rust Remover 454 G	500 g	1	Yes	Pwd
234	Ringer Solution 100 Tbls	52 g	1	Yes	Pwd
235	Barium Chloride	50 g	1	Yes	Pwd

236	Calcium Chlorid geschmolzen	250 g	1	Yes	Pwd
237	Nessler reagent	500 mℓ	1	Yes	Liq
238	Barium hydroxide	250 g	1	Yes	Pwd
239	Kaliumchromat	500 g	1	Yes	Pwd
240	Lactose	500 g	1	Yes	Pwd
241	Nutrient Broth	500 g	2	Yes	Pwd
242	Cupfer (II) sulfate	250 g	1	Yes	Pwd
243	Magnesiumnitrat-6-hydrat	500 g	1	Yes	Pwd
244	Natronwassergas	1 kg	1	Yes	Pwd
245	Triple sugar Inn Agar	500 g	1	Yes	Pwd
246	Vibro diagnostic Agar	500 g	1	Yes	Pwd
247	BPLS agar	500 g	2	Yes	Pwd
248	Selenite-cystine enrichment broth	500 g	1	Yes	Pwd
249	Muller-kauffmam agar	500 g	1	Yes	Pwd
250	Salmonellae Shigellae	500 g	1	Yes	Pwd
241	Lathannam Oxide	500 g	1	Yes	Pwd
242	Salicylic Acid	500 g	1	Yes	Pwd
243	Buffer powder Pillows Carcite	1500 g	1	Yes	Pwd
244	Calcium Carbonate precipitayed	1 kg	1	Yes	Pwd
245	Zincacetat-2-hydrat	500 g	1	Yes	Pwd
246	Potassium Chromate	250 g	1	Yes	Pwd
247	Zirconyl Chloride	250 g	1	Yes	Pwd
248	Zinn	250 g	3	Yes	Pwd
249	Ferroinlosung	100 mℓ	1	Yes	Pwd
250	Zinc Powder	250 g	1	Yes	Pwd
251	Crystal Violet	500 mℓ	1	Yes	Liq
252	Sodium Nitrite	500 g	1	Yes	Pwd
253	Ammonium hydrogen phosphate	500 g	1	Yes	Pwd
254	Silver Chloride	10 g	1	Yes	Pwd
255	Ferrous Ammonium Sulfate	250 g	1	Yes	Pwd
256	2-phenylalamin	100 g	1	Yes	Pwd
247	Blei (II)-nitrat	1 kg	1	Yes	Pwd
248	Hydrazinium sulfat	100 g	1	Yes	Pwd
249	Bromocresol Green Indicator	50 g	2	Yes	Pwd
250	2-Sulphophenylazo disulphuric trisodium salt	10 g	1	Yes	Pwd
251	1,10 Phenanthrolin	10 g	1	Yes	Pwd
252	Bromothymol Blue	10 g	3	Yes	Pwd
253	Bromothymol Blue Soln	100 mℓ	1	Yes	Liq
254	Neutralrot	25 g	2	Yes	Pwd
255	Murexide	5 g	3	Yes	Pwd
256	Phenol Red	10 g	5	Yes	Pwd
257	Methylene Blue	100 g	1	Yes	Pwd
258	Resazurin Tablets	5 g	100	Yes	Pwd
259	1,5 Diphenylcarbazone	25 g	1	Yes	Pwd

260	Nitrification Inhibitor formula	50 g	2	Yes	Pwd
261	Nickel Metal	100 g	1	Yes	Pwd
262	Naphtholgrum B	50 g	1	Yes	Pwd
263	Xylene cyanol FF	25 g	1	Yes	Pwd
264	Malachite green	25 g	1	Yes	Pwd
265	Bromocresol Purple	10 g	1	Yes	Pwd
266	Crystal Violet	25 g	2	Yes	Pwd
267	TKN Indicator Soln	100 mℓ	2	Yes	Liq
268	Methyl orange Ind	2 L	2	Yes	Liq
269	Phenol Cell Test in cuvette	25 mℓ	25	Yes	Liq
Chemistry Lab					
270	Chloride (Nanocolor chlorid 50 & 200)vials	10 mℓ	150	Yes	Liq
271	Tris Buffer contains acetylacetate soln	1 L	1	Yes	Liq
272	Sodium Hydroxide Soln	250 mℓ	1	Yes	Liq
273	Silicon STD Soln	500 mℓ	1	Yes	Liq
274	Silver Nitrate STD Soln	1000 mℓ	3	Yes	Liq
275	COD STD Soln	2.5 L	2	Yes	Liq
276	Ferric Nitrate STD Soln	500 mℓ	1	Yes	Liq
277	StablCal Calibration Set vials	20 mℓ	4	Yes	Liq
278	Iron photometric test -/box	30 mℓ	2	Yes	Liq
279	Manganese Test (500 tests) /box	220 mℓ	1	Yes	Pwd/Liq
280	Manganese Test 250 tests)/box	220 mℓ	1	Yes	Pwd/Liq
281	Nitrate Test /box	30 mℓ	2	Yes	Pwd/Liq
282	Sulphate Test /box	30 mℓ	1	Yes	Pwd/Liq
283	Sulphate Cell test (5-250 mg/ℓ)/box	30 mℓ	1	Yes	Liq
284	AccuVac SPADNS Fluoride reagent 25 ampules/box	10 mℓ	1	Yes	Liq
286	Empty Vials for Nitroge-Ammonia (0-50mg/ℓ)	25 L	3	Yes	Liq
287	Broken Glassware (bucket)	25 L	1		
288	Spillage absorption granules	1 kg	2	Yes	Pwd
289	Triton	1 L	1	Yes	Liq
Internal Store Room No.2					
291	Hydrochloric Acid 35.4%	2.5 L	1	Yes	Liq
292	Pyridine	2.5 L	1	Yes	Liq
293	Amyl-alcohol	5 L	1	Yes	Liq
294	Sodium Chloride 1.0 M	2.5 L	3	Yes	Liq
295	Sodium Hydroxide 1.0 N	2.5 L	2	Yes	Liq
296	Potassium Hydroxide 1.0 N	2.5 L	1	Yes	Liq
297	Methyl Red	10 g	1	Yes	Pwd
298	Eriochromschwarz T	25 g	2	Yes	Pwd
299	Brilliant Cresyl Blue	25 g	1	Yes	Pwd
300	Methyl Orange Indicator	25 g	1	Yes	Pwd
301	Nicrosine	25 g	1	Yes	Pwd

302	Methyl Violet	25 g	1	Yes	Pwd
303	Phenolphthalin Powder Ind	100 g	2	Yes	Pwd
304	Quecksilber (Hg)	250 g	1	Yes	Pwd
305	Safranine O	25 g	1	Yes	Pwd
306	Fuchsin Basic for Micro-biology	25 g	1	Yes	Pwd
307	Methyl Orange Indicator Soln	100 mℓ	2	Yes	Pwd
308	Phenol Red Lovibond 5g Pills/box	250/box	8	Yes	Pwd

No:	CHEMICAL NAME	VOLUME	QTY	MSDS	SAMPLE
309	COD Reagent vials 7 mℓ (drum is full)	100 lt	2	Yes	Liq
310	Ammonia Reagents Vials 7 mℓ (drum is full)	100 lt	2	Yes	Liq
311	Potassium Iodide	500 g	2	Yes	Pwd
312	Sodium Acetate Trihydrate	500 g	2	Yes	Pwd
313	Ascorbic Acid	500 g	3	Yes	Pwd
314	Sodium Hydroxide Pellets	500 g	2	Yes	Pwd
315	Starch Soluble CP	500 g	1	Yes	Pwd
316	Methyl Orange	25 g	1	Yes	Pwd
317	Bromocresol Green	25 g	1	Yes	Pwd
318	Ferrozine	1 g	1	Yes	Pwd
319	Potassium Sulphate Anhydrous 7g Tablets	900 g	1	Yes	Pwd
320	Isobutanol	2.5 ℓ	2	Yes	Liq
321	Ammonia Solution 25%	2.5 ℓ	1	Yes	Liq
322	Nitrogen Ammonia Standard Solution 1.0 mg/ℓ	500 mℓ	2	Yes	Liq
323	Fluoride Standard Solution	500 mℓ	2	Yes	Liq
324	Nitrate Nitrogen standard Solution 1.0 mg/ℓ	500 mℓ	2	Yes	Liq
325	Iron Standard Solution 1000 mg/ℓ	500 mℓ	2	Yes	Liq
326	Sodium Standard Solution 1000 mg/ℓ	500 mℓ	3	Yes	Liq
327	Aluminium standard Solution 1000 mg/ℓ	500 mℓ	2	Yes	Liq
343	Chloride Standards Solution 1000 mg/ℓ	500 mℓ	3	Yes	Liq
344	Nitrate Standard Solution 1000 mg/ℓ	500 mℓ	2	Yes	Liq
345	Sulfate Standard Solution 1000 mg/ℓ	500 mℓ	2	Yes	Liq
346	Nitrogen Ammonia Standard Solution 10.0 mg/ℓ	500 mℓ	4	Yes	Liq
347	APA Standard 2 Alkalinity	1000 mℓ	1	Yes	Liq
348	Buffer Solution pH 7	500 mℓ	10	Yes	Liq
349	Nitrite Standard Solution 250 mg/ℓ	500 mℓ	6	Yes	Liq
350	EDTA Solution 0.02M	2.5 ℓ	4	Yes	Liq
351	Phosphate Standard Solution 1000 mg/ℓ	125 mℓ	2	Yes	Liq

352	Manganese Standard Solution 1000 mg/ℓ	125 mℓ	4	Yes	Liq
353	Calcium Standard Solution 1000 mg/ℓ	125 mℓ	2	Yes	Liq
354	Sodium Standard Solution 1000 mg/ℓ	125 mℓ	2	Yes	Liq
355	Ammonium Standard Solution 50.0 mg/ℓ	125 mℓ	2	Yes	Liq
356	Ammonium Standard Solution 12.0 mg/ℓ	125 mℓ	4	Yes	Liq
357	Magnesium Standard Solution 1000 mg/ℓ	125 mℓ	2	Yes	Liq
358	Potassium Standard Solution 1000 mg/ℓ	125 mℓ	4	Yes	Liq
359	Ammonium Standard Solution 0.4 mg/ℓ	125 mℓ	2	Yes	Liq
360	Iron Standard Solution 1000 mg/ℓ	125 mℓ	3	Yes	Liq
361	Aluminium standard Solution 1000 mg/ℓ	100 mℓ	4	Yes	Liq
362	Phosphorus Standard Solution 1000 mg/ℓ	100 mℓ	1	Yes	Liq
364	Managanese Standard Solution 1000 mg/ℓ	100 mℓ	3	Yes	Liq
365	Potassium Chloride Solution 3M	500 mℓ	3	Yes	Liq
366	Potassium Chloride Standard Solution 100 mg/ℓ	500 mℓ	2	Yes	Liq
367	Calcium Chloride Standard Solution 1000 mg/ℓ	1000 mℓ	2	Yes	Liq
368	Conductivity Solution 1413 mS/cm	250 mℓ	4	Yes	Liq
369	Conductivity Solution 12.88 mS/cm	125 mℓ	14	Yes	Liq
370	Conductivity Solution 12.88 mS/cm	250 mℓ	4	Yes	Liq
371	DPD Chlorine Standard pkt/4	10 mℓ	8	Yes	Liq
372	Color Standard Solution 15 Platinum Cobalt	1000 mℓ	2	Yes	Liq
373	Color Standard Solution 500 Platinum Cobalt	500 mℓ	2	Yes	Liq
374	Buffer Solution pH 10	500 mℓ	9	Yes	Liq
375	Conductivity Solution 12.88 mS/cm	500 mℓ	2	Yes	Liq
376	Ammonia Reagent	34 mℓ	2	Yes	Liq
Powder Pillows					
377	NitriVer 3 Nitrite Reagent pkt/100	25 g	4	Yes	Pwd
378	SulfaVer 4 Sulfate Reagent pkt/100	25 g	5	Yes	Pwd
379	AluVer 3 Aluminium Reagents pkt/100	10 g	6	Yes	Pwd
380	FerroVer Iron Reagents pkt/100	25 g	1	Yes	Pwd
381	NitraVer 5 Nitrate Reagents pkt/100	10 g	3	Yes	Pwd
382	Broken Glassware per/bucket (Full)	50 ℓ	4		
383	Microbiological Waste	Quantitrays and sim plates might be containing HBA			
384	Sterikon Bioindicator				
385	Mixed waste i.e pipette tips, towel paper, empty reagent sachets, sample bottles				

ANNEXURE 2 (MSDS found in OPS2023-HH-035 FOLDER)