



SECTION 3

TECHNICAL REQUIREMENTS AND SPECIFICATIONS

FOR PURCHASE OF

**CHEMICAL MATERIALS FOR NEW WATER TREATMENT PLANT AND
NEW GAS TREATMENT PLANT**

TENDER No.: CMIT-PRT-10.30-150282

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Dubai, U.A.E.

Requirement of Technical Standard:

1. Supplier shall state and guarantee that the chemical specification should be unchanged and must be developed to give good results and to meet the requirements;
2. Chemical for fresh water treatment requirement:

2.1 The Raw water Quality as follow:

pH Determination	8.23
Sp. Gr. at 15. 6°C	1.0005
Components	Concentration/ (mg/l)
Carbonate	6
Bicarbonate	159
Chloride	568
Sulfate	260
Calcium	104
Magnesium	87
Sodium+potassium	268
TDS at 180°C	1700
TSS	200MAX

2.2 The chemical for fresh water treatment which supplied by Supplier shall capable to treat the freshwater of Missan oilfield and meet the quality requirement as follow:

Fresh water quality: Characteristic	The Maximum allowable limit
Color	10 units
Turbidity (NTU)	5 units
Taste	Accepted
Smell	Accepted
pH value	6.5-8.5

3. The chemical for gas treatment to be provided by supplier shall capable to treat the gas of Missan oilfield, and meet the requirement as follow:

$$\text{H}_2\text{S (V\%)} \leq 7.5\text{PPM}$$

$$\text{CO}_2 \text{ (V\%)} \leq 2.5\%$$

4. The chemical for R.O(demineralization) water which supplied by supplier shall capable to treat the water of Missan oilfield, and meet the requirement as follow:

pH	>7
Hardness (CaCO ₃) mmol/l	≈0
Total dissolved solids mg/l	≤50
Na+ mg/l	≤15
SO ₄ ²⁻ mg/l	≤10
Cr- mg/l	≤15
Suspended solids mg/l	≤0
SiO ₂ mg/l	≤0.2
Conductivity μs/cm	<50

5. Material Safety Data Sheets (MSDS) and Product technical Data Sheets (PDS) shall be provided by Supplier;
6. The chemical material shall be used and work effective to treat the freshwater/oily water/gas in the Missan Oil Fields.
7. The chemical material shall be effective and workable for a period of 24months from the date of delivery;

Requirement of Material Pack:

1. The liquid chemical shall be packed in 200 liter standard steel drums/25kg standard bucket with batches, each batch include four drums and a wooden tray at bottom, easy to unload by forklift.
2. The drums will not return back to supplier.
3. The solid chemical shall be packed in 25kg/bag, and the package will strong enough to protect chemical during transporting and storage.
4. Considering the storage situation at BUT, the solid chemical shall be transport, storage in the containers; The containers will not return back to supplier, will be used for solid chemical storage on site.

Requirement of Material Delivery:

1. Supplier shall deliver the chemical to Buzurgan Terminal, Missan Province, Iraq.
2. Supplier shall ensure the deliver all the chemical materials to Buzurgan Terminal, Missan Province, Iraq within five (5) months after the Contract Date.

Other requirement:

1. Free Engineer on-call Service should be provided by Supplier in case of the unsatisfied performance for water and gas treatment. Visa, accommodation, transportation and Catering shall be provided by Supplier.