

**INFORMATION NEEDED FOR PREPARATION OF BUDGETARY QUOTATION FOR MBR
QUESTIONNAIRE – FOR SMALL FLOW SEWAGE TREATMENT**

1. *Project name & number:* _____
2. *Project location:* _____
3. *Type of Project:* New Plant _____; Upgrading _____
4. *Treated effluent discharge:* River/creek/sea/lake (); land seepage ()
5. *Influent sewage flow at present:* Average _____; Maximum _____; Minimum _____
6. *Influent sewage flow at design year:* Average _____; Maximum _____; Minimum _____
7. *Required treated effluent quality:* TSS ___ mg/L; BOD₅ ___ mg/L; Fecal coliforms _____
8. *Additional treatment required? If so, then:* Ammonia ___ mg/L; TN ___ mg/L; TP ___ mg/L
9. *Reason for wastewater treatment plant: Regulatory compliance:* _____ ;
Hauling cost: _____ ; Others (please specify) _____
10. *Site Conditions:*

Wastewater temperatures: Maximum Summer _____ (°C); Minimum Winter _____ (°C)

Height above sea-level: _____

Power available: a. Three-phase: _____ volts, _____ Amperes, _____ Hz;
b. Single-phase: _____ volts, _____ amperes, _____ Hz
11. *Has the project been approved after public hearings?* _____
12. *Have the funds been allocated for the project?* _____
13. *Are there septic tanks? If so, please give details and state capacity:* _____
14. *Sludge handling:* Thickening & hauling away (); Dewatering & hauling away (); Thickening, aerobic digestion, and dewatering (); Other (please specify) _____
15. *Area available for wastewater treatment plant:* _____
16. *General timeline of the project:* _____

DOMESTIC SEWAGE PARAMETERS NEEDING ANALYSIS

CONSTITUENT	UNIT	VALUE
pH		
Color		
Temperature	°C	
Vegetable / Animal FOG (Fats, Oil & Grease)	(mg/L)	
Settleable Solids	(mL/L)	
TSS (total suspended solids)	(mg/L)	
VSS (volatile suspended solids)	(mg/L)	
TS (total solids)	(mg/L)	
BOD ₅ (biochemical oxygen demand)	(mg/L)	
COD (chemical oxygen demand)	(mg/L)	
bCOD (biodegradable chemical oxygen demand)	(mg/L)	
rbCOD (readily biodegradable COD)	(mg/L)	
TKN (total Kjeldahl nitrogen)	(mg/L)	
NH ₄ -N (ammonia nitrogen)	(mg/L)	
TP (total phosphorus)	(mg/L)	
Alkalinity	(mg/L as CaCO ₃)	

^a Depends on the fresh water used by the consumers. We also need the city water analysis, as below.

CITY WATER PARAMETERS NEEDING ANALYSIS

CONSTITUENT	UNIT	VALUE
pH		
Calcium	(mg/L as CaCO ₃)	
Magnesium	(mg/L as CaCO ₃)	
Sodium	(mg/L)	
Potassium	(mg/L)	
Bicarbonate	(mg/L as CaCO ₃)	
Chloride	(mg/L)	
Sulfate	(mg/L)	
Iron	(mg/L)	