 PERTECO SRL						JOB NUMBER				
						DATE				
						AUTHOR				
QUESTIONNAIRE FOR GENERAL WTP					Rev.	01				

REQUESTED DATA FOR THE WATER TREATMENT PLANT (WTP)

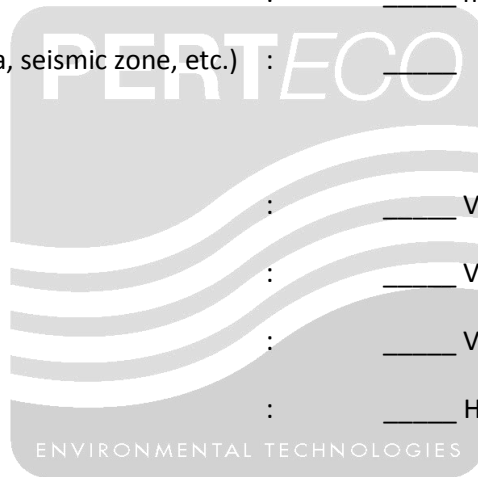
- Application : _____

ENVIRONMENTAL DATA

- Temperature min. : _____ °C
- Temperature max. : _____ °C
- Altitude (m.a.s.l) : _____ m
- Plant location (geographic area, seismic zone, etc.) : _____

ELECTRICAL DATA

- Low voltage : _____ V AC (+/- 5%)
- Auxiliary voltage : _____ V AC (+/- 5%)
- Solenoid voltage : _____ V DC (+/- 5%)
- Network frequency : _____ Hz (+/- 1%)



INLET FLUID MAIN PROPERTIES (/)

Source

- sea; river; lake; groundwater (well pit); urban wastewater;
- rainwater; industrial wastewater : _____ (specify the process)

Flow type

- continuous;
- discontinuous : _____ hours/day (specify the duration)


Flow rate

- constant; variable;

Flow rate (mean) : _____ m³/h

Temperature : _____ °C

Pressure : _____ bar

 PERTECO SRL						JOB NUMBER				
						DATE				
						AUTHOR				
QUESTIONNAIRE FOR GENERAL WTP					Rev.	01				

OUTLET FLUID MAIN PROPERTIES (□/■)

Final destination

- drinking (potable) water;
- industrial (technological) use ;
- agricultural use (irrigation);
- reuse: _____ (specify the need)
- sewerage discharge; surface water discharge (sea, river, lake); ground discharge;

Laws /regulations/standards to be met: _____

Flow rate (mean) : _____ m³/h

Temperature : _____ °C

Pressure : _____ bar


PLANT LAYOUT

Please provide drawings with plant view and available space foreseen for Water Treatment Plant, if available the Auto CAD files (.dwg).

INLET/OUTLET WATER PROPERTIES (□/■)

Note: additional data not suggested in the following table but that may be important for the treatment must be reported or could be requested

- PHYSICAL and CHEMICAL PROPERTIES
- AGGREGATE PARAMETERS FOR ORGANIC MATTER
- MICROBIOLOGICAL PROPERTIES
- others*

 PERTECO SRL					JOB NUMBER				
					DATE				
					AUTHOR				
QUESTIONNAIRE FOR GENERAL WTP				Rev.	01				

PHYSICAL and CHEMICAL PROPERTIES

Inorganic water quality indicators		Unit	Raw Water	Required Value
<input type="checkbox"/>	pH (at 20°C)	//		
<input type="checkbox"/>	Total Hardness	mg/l CaCO ₃		
<input type="checkbox"/>	Carbonate Hardness	mg/l CaCO ₃		
<input type="checkbox"/>	Total Alkalinity	mg/l CaCO ₃		
<input type="checkbox"/>	Conductivity	μS/cm at 20 °C		
<input type="checkbox"/>	Turbidity	NTU		
Solids/Particles		Unit	Raw Water	Required Value
<input type="checkbox"/>	Solids concentration			
<input type="checkbox"/>	Total Solids (TS)	mg/l		
<input type="checkbox"/>	Total Suspended Solids (TSS)	mg/l		
<input type="checkbox"/>	Total Dissolved Solids (TDS)	mg/l		
<input type="checkbox"/>	Settleable solids	ml/l		
<input type="checkbox"/>	Solids size			
<input type="checkbox"/>	% wt/wt with size > 10 mm	%		
<input type="checkbox"/>	% wt/wt with size > 1 mm	%		
Compounds, cations and anions		Unit	Raw Water	Required Value
<input type="checkbox"/>	Nitrogen (N)			
<input type="checkbox"/>	Total Kjeldahl Nitrogen	mg/l		
<input type="checkbox"/>	Organic Nitrogen	mg/l		
<input type="checkbox"/>	Ammonia (N-NH ₄ ⁺)	mg/l		
<input type="checkbox"/>	Nitrite (NO ₂)	mg/l		
<input type="checkbox"/>	Nitrate (NO ₃)	mg/l		
<input type="checkbox"/>	Phosphorus (P)			
<input type="checkbox"/>	Total Phosphorus	mg/l		
<input type="checkbox"/>	Organic Phosphorus	mg/l		



PERTECO SRL

JOB NUMBER

DATE


AUTHOR

**QUESTIONNAIRE FOR
GENERAL WTP**

Rev.

01

Compounds, cations and anions		Unit	Raw Water	Required Value
<input type="checkbox"/>	Sulphates (SO ₄ --)	mg/l		
<input type="checkbox"/>	Chlorides (Cl-)	mg/l		
<input type="checkbox"/>	Fluoride (F-)	mg/l		
<input type="checkbox"/>	Aluminium (Al)	mg/l		
<input type="checkbox"/>	Cadmium (Cd)	mg/l		
<input type="checkbox"/>	Total Iron (Fe)	mg/l		
<input type="checkbox"/>	Iron (Fe 2+)	mg/l		
<input type="checkbox"/>	Calcium (Ca 2+)	mg/l		
<input type="checkbox"/>	Magnesium (Mg 2+)	mg/l		
<input type="checkbox"/>	Manganese (Mn 2+)	mg/l		
<input type="checkbox"/>	Potassium (K +)	mg/l		
<input type="checkbox"/>	Sodium (Na +)	mg/l		
<input type="checkbox"/>	Arsenic (As 3+/As 5+)	mg/l		
<input type="checkbox"/>	Barium (Ba 2+)	mg/l		
<input type="checkbox"/>	Boron (B +)	mg/l		
<input type="checkbox"/>	Chromium (Cr 3+/Cr6+)	mg/l		
<input type="checkbox"/>	Silica (SiO ₂)	mg/l		
<input type="checkbox"/>	Nickel (Ni)	mg/l		
<input type="checkbox"/>	Lead (Pb)	mg/l		
<input type="checkbox"/>	Copper (Cu)	mg/l		
<input type="checkbox"/>	Tin (Sn)	mg/l		
<input type="checkbox"/>	Zinc (Zn)	mg/l		
<input type="checkbox"/>	Total cyanides	mg/l		
<input type="checkbox"/>	Free active chlorine	mg/l		
<input type="checkbox"/>	Sulfides	mg/l		
<input type="checkbox"/>	Sulfites	mg/l		
<input type="checkbox"/>	Aromatic organic solvents	mg/l		

 PERTECO SRL					JOB NUMBER				
					DATE				
					AUTHOR				
QUESTIONNAIRE FOR GENERAL WTP				Rev.	01				

Other compounds		Unit	Raw Water	Required Value
<input type="checkbox"/>	Nitrogen organic solvents	mg/l		
<input type="checkbox"/>	Chlorinated solvents	mg/l		
<input type="checkbox"/>	Surfactants	mg/l		
<input type="checkbox"/>	Grease and oils (vegetal/animal)	mg/l		
<input type="checkbox"/>	Hydrocarbons	mg/l		
<input type="checkbox"/>	_____			

AGGREGATE PARAMETERS FOR ORGANIC MATTER

Parameter		Unit	Raw Water	Required Value
<input type="checkbox"/>	BOD ₅ (Biochemical Oxygen Demand)	mg/l		
<input type="checkbox"/>	COD (Chemical Oxygen Demand)	mg/l		
<input type="checkbox"/>	TOC (Total Organic Carbon)	mg/l		

MICROBIOLOGICAL PROPERTIES

Parameter (microorganism)		Unit	Raw Water	Required Value
<input type="checkbox"/>	Escherichia coli			
<input type="checkbox"/>	Giardia Lambia			
<input type="checkbox"/>	Vibrio cholerae			

Note: In case of different flow rates to be treated, please fill in one of these forms for each flow rate.

Please fill in "Required Value" where applicable; if not known "Water Value" will be estimated.