

**AQUABIO LIMITED**  
**Water, Wastewater & Air Treatment Processes**  
**Project Management**



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## **AQUA-DAF PROCESS QUESTIONNAIRE**

### **INDUSTRIAL & MUNICIPAL WASTEWATERS**

For **water & wastewater** originating from :

Municipal, industrial 'Wet' Processing, snack foods, fruit and vegetable processing and preparation, cooking plants, carbonated and soft drinks processing/ breweries, meat/fish processing and packing, pharmaceutical, chemical & petro-chemical, paper & pulp Industries, dye houses / textile finishers, tanneries.

#### **Advantages of AQUA-DAF High Rate Dissolved Air Flotation**

- Significantly reduced 'footprint' compared with other conventional DAF other 'open bed' flotation processes
- Modular package plant design to customer requirements
- Easily accessible and low maintenance
- No membranes - therefore no fouling or backflushing
- Inexpensive installation compared with other conventional separation processes
- Reliable performance
- Choice of chemical pre-treatment techniques - Serpentine coil or reaction chambers
- Robust construction with a choice of bespoke materials for corrosion resistance and commercial considerations (flotation chambers in 304/316 Stainless steel, coated steel or GRP)
- Bench and pilot tests available
- Ideal for 'stop/start' treatment
- Low level sludge hopper ensures rapidly settleable solids are efficiently handled.
- The chemical treatment and pressurised recycled system design to suit client requirements.
- Units can be skid mounted and pre-tested before delivery to site.
- Multiple units can be operated in series or parallel

**Aquabio Limited** can provide some or all of the necessary **services and equipment** for the '**Turnkey**' package:

Initial studies, treatability testing and full scale pilot trials  
Design & engineering services.  
Installation of turnkey wastewater treatment plant.  
Performance improvement of existing wastewater treatment facilities.

**Wastewater packages** can be supplied which **satisfy** the following requirements:

Reduction in sewer discharge fees payable to the local authority.  
Discharge of treated wastewater to watercourse.  
Design, build, maintain capability.



To prepare proposals for the treatment of the wastestream from a particular site we require the following information:

Company name :	
Contact name :	
Site Location :	
Address :	
Postcode :	
Telephone :	
Fax :	
E Mail :	

**Wastewater Type :** .....

**Wastewater Source(s) :** .....

**If Factory Site, please provide production cycle details**

Working week : ..... to .....

Shift details (8hr / 16hr / 24hr) .....

Washdown days : .....

Peak load days : .....

No. of wastewater streams .....

**Is volume inclusive of Washdown water; Rainwater; Other (e.g. sewage) ?**

Please give proportions:

**Are detergents/disinfectants used in washdown ?**

If so, please give details :

**Composition of Wastewater** (Please also attach Water Authority/EA/company data if available)

Please specify for the individual wastestreams streams if no combined ‘end of pipe’ data is available (attach all data where possible, internal factory, water company etc.):

Parameter	Minimum	Average 24hrs)	Peak	Units
Flow rate (24hrs)				m <sup>3</sup> /day
Spot Flow Rate				l/s
COD <sub>Total</sub>				mg/l (p.p.m.)
COD <sub>Settled (1hr)</sub>				mg/l (p.p.m.)
BOD <sub>5</sub>				mg/l (p.p.m.)
pH Range				
Wastewater Temp				°C
Suspended solids				mg/l (p.p.m.)
Settleable Solids				mg/l (p.p.m.)
Fats, Oil & Grease				mg/l (p.p.m.)
Phosphate				mg/l (p.p.m.)
Sulphate (SO <sub>4</sub> <sup>2-</sup> - S or SO <sub>4</sub> <sup>2-</sup> )				mg/l (p.p.m.)
TKN (Total Kjeldhal Nitrogen)				mg/l (p.p.m.)
Ammonia				mg/l (p.p.m.)
Others (e.g.Chloride Cl <sup>-</sup> etc.)				

**Does existing on site treatment/water re-use already exist ?** If so, please give details:

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Please provide site layouts/diagrams (incl. existing foul/trade drainage), wastewater collection, storage and/or handling details if available, **SPACE AVAILABILITY MAY BE IMPORTANT.**

**Is pressure to act from :**

Local Authority	Yes/No
Water Authority	Yes/No
EA	Yes/No
Cost Saving/Payback	Yes/No

**Wastewater will be discharged to :**

River/Watercourse	Yes/No
Sewer	Yes/No
Other	Yes/No

**Discharge Consents :**

Complete where appropriate :

Parameter	Current Value	Future Value	Units
Flow rate (24hrs)			m <sup>3</sup> /day
Spot Flow Rate			l/s
COD <sub>Total</sub>			mg/l (p.p.m.)
COD <sub>Settled (1hr)</sub>			mg/l (p.p.m.)
BOD <sub>5</sub>			mg/l (p.p.m.)
pH Range			
Wasetwater Temp			°C
Suspended solids			mg/l (p.p.m.)
Settleable Solids			mg/l (p.p.m.)
Fats, Oil & Grease			mg/l (p.p.m.)
Phosphate			mg/l (p.p.m.)
Sulphate (SO <sub>4</sub> <sup>2-</sup> - S or SO <sub>4</sub> <sup>2-</sup> )			mg/l (p.p.m.)
TKN/Ammonia			mg/l (p.p.m.)
Others			

**PLEASE RETURN TO : AQUABIO LIMITED**