

Nitrogen Abatement – ABC-N[®]

Certain site conditions such as the drain field being too close to a lake, river or stream. The lake, river or stream may experience a negative impact by Total Nitrogen from the septic system entering the waterway.

Unconfined aquifer may also be harmed by the entrance of Total Nitrogen into the sub-surface water.

The regulations may require that additional measures be taken to reduce the Total Nitrogen to specific levels to eliminate or reduce the accumulative effect of the Total Nitrogen.

In these situations, The ABC-N can be added after the MicroFAST[®] unit to reduce further the Total Nitrogen.

The introduction of a carbon source by a metering pump and the ABC-N is used. The selection of the ABC-N is based on the daily sewage flow from a residence.

Facilities that have a higher concentration of ammonia-nitrogen (such as a school or church) will require a site specific design and equipment selection.

The following chart is based on domestic residential strength sewage wastewater.

Design Daily Flow of Treated Sewage Wastewater at BOD5/TSS = 30 mg/l each	ABC-N [™] Model No.	Polishing Model
11,365 litres (2,500 imp gals)	ABC-N [™] 1.0	MicroFAST [®] 0.5
17,034 litres (3,750 imp gals)	ABC-N [™] 1.5	MicroFAST [®] 0.75
34,068 litres (7,500 imp gals)	ABC-N [™] 3.0	MicroFAST [®] 0.75
51,103 litres (11,250 imp gals)	ABC-N [™] 4.5	MicroFAST [®] 3.0
102,200 litres (22,500 imp gals)	ABC-N [™] 9.0	MicroFAST [®] 3.0

Design Applications, Operations & Maintenance

Contact Pinnacle for assist in the design, application, operation and maintenance of the ABC-N for the site specific conditions.

Phosphorus Abatement – ABC-P®

Certain site conditions such as the drain field being too close to a lake, river or stream. The lake, river or stream may experience a negative impact by Phosphorus from the septic system entering the waterway.

Unconfined aquifer may also be harmed by the entrance of Phosphorus into the sub-surface water.

The regulations may require that additional measures be taken to reduce the Phosphorus to specific levels to eliminate or reduce the accumulative effect of the Phosphorus.

In these situations, The ABC-P can be added after the MicroFAST® unit to reduce further the Phosphorus.

The introduction of a alum by a metering pump and the ABC-P is used. The selection of the ABC-P is based on the daily sewage flow from a residence.

Facilities that have a higher concentration of Phosphorus will require a site specific design and equipment selection.

The following chart is based on domestic residential strength sewage wastewater.

Laminar ABC-P™ Model Number	Daily Sewage Flow Rate	Mixing Compartment Minimum Capacity	Laminar ABC-P™ Minimum Capacity
ABC-P™ 0.5	1,900 Litres	1,900 Litres	3796 Litres
ABC-P™ 0.75	2,841 Litres	1,900 Litres	3,796 Litres
ABC-P™ 1.0	3,796 Litres	2120 Litres	4,259 Litres
ABC-P™ 1.5	5,678 Litres	2120 Litres	4,259 Litres
ABC-P™ 3.0	11,365 Litres	5687 Litres	8,523 Litres
ABC-P™ 4.5	17,048 Litres	5687 Litres	15,970 Litres
ABC-P™ 9.0	34,095 Litres	11,365 Litres	32,280 Litres

Laminar ABC-P™ Model Number	Daily Sewage Flow Rate	Mixing Compartment Minimum Capacity	Laminar ABC-P™ Minimum Capacity
ABC-P™ 0.5	416 imp gals	416 imp gals	835 imp gals
ABC-P™ 0.75	625 imp gals	416 imp gals	835 imp gals
ABC-P™ 1.0	834 imp gals	466 imp gals	937 imp gals
ABC-P™ 1.5	1,250 imp gals	466 imp gals	937 imp gals
ABC-P™ 3.0	2,500 imp gals	1,250 imp gals	1,875 imp gals
ABC-P™ 4.5	3,750 imp gals	1,250 imp gals	3,513 imp gals
ABC-P™ 9.0	7,500 imp gals	2,500 imp gals	7,100 imp gals

Design Applications, Operations & Maintenance

Contact Pinnacle for assist in the design, application, operation and maintenance of the ABC-P for the site specific conditions.