

Contact us:

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Product Range:

Commercial/Small Community Systems:

- Puraflo Multiple Module
- Puraflo Peat Filter Bed
- Puraflo Tertiary Treatment
- Moving Bed Biological Reactor (MBBR - Concrete Tank Mechanical Aeration)
- Platinum 2000 Series (GRP Package Mechanical Aeration)
- High Rate Sand Filters
- Reed Beds
- Pumping Stations
- Nutrient Removal
- Telemetry Monitoring
- Flow Metres
- Composite Sampling

Single House:

- Puraflo Single House
- Platinum Single House (Package Plant)
- Puraflo Tertiary Treatment
- Phosphorus Reduction

Rainwater Harvesting:

- RainSava Domestic & Commercial Systems

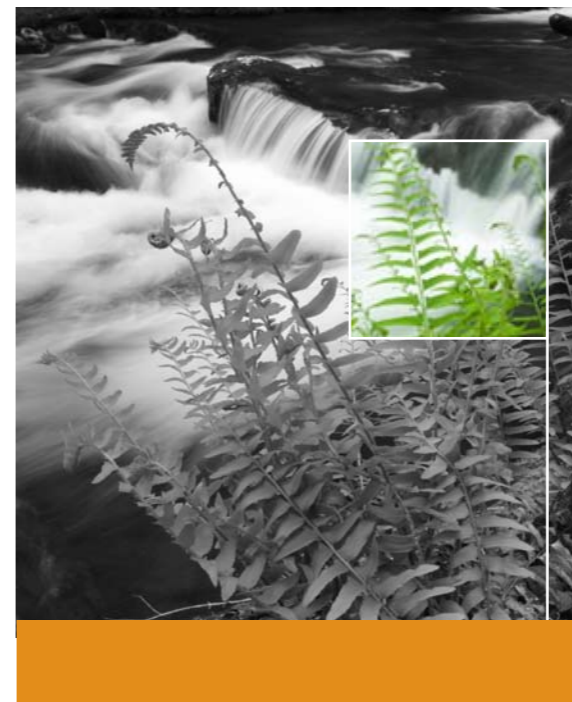
Surface Water Treatment:

- Silt Traps
- Separators
- Storm Water Attenuation Tanks

Services:

- National Network of Agents/Installers
- Pre-Planning Site Specific Reports/Quotations
- Delivery/Installation/Commissioning
- Service Contracts
- Maintenance Call Out Service

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Small Community Systems

www.bnm.ie



- Secondary Treatment
- Tertiary Treatment Option
- Flexible Modular System
- Cost Efficient and Effective
- Minimal Maintenance
- Proven Track Record
- Unique System Design
- High Treatment Efficiency

Puraflo: the Bord na Móna Environmental Sewage Treatment Solution

If you require a sewage treatment system or if you have an existing septic tank /sewage treatment plant that needs upgrading, Bord na Móna Environmental has a sewage treatment solution for you.

Why choose Bord na Móna Environmental?

- Leading designer, manufacturer and supplier of sewage treatment systems for more than 20 years.
- Supplier of reliable, sustainable, long-term solutions for on-site sewage treatment.
- Systems and treatment processes for a wide range of applications including:
 - Single houses
 - Housing developments
 - Businesses
 - Leisure centres
 - Hotels
 - Golf clubs
 - Caravan parks
 - Nursing homes
 - Schools etc.
- Customer Focused and Responsive: Customer assistance from pre-planning to project completion, warranty, service agreements, maintenance call-out service.
- International Experience: Ireland, UK, USA.

Puraflo: The System

The Puraflo Peat Bio-Filter is designed to provide effective, cost efficient, low maintenance, secondary and/or tertiary wastewater treatment.

The company's extensive experience with the Puraflo system and long-term research on the performance of the system shows extremely high treatment efficiency with significant reductions in the BOD and TSS content of wastewater and similarly high reductions in faecal coliforms and bacterial numbers.

What Our Customers Say:

Customers come to Bord na Móna Environmental for a sewage treatment system and gain the added benefit of the company's long term experience and its focus on customer service:

"I bought the Puraflo sewage treatment system as it's the best on the market and was highly recommended by our architect. Purchasing the system was very easy and staff were extremely helpful".

"Top class service re submitting a plan and installed the system on the day that was appointed. Excellent service and I have recommended your system to others".

Our Clients Include:

- Builder Contractors**
- Civil Contractors**
- Engineers**
- Architects**
- Commercial Businesses**
- Homeowners**
- Local Authorities**
- Self-Builders/Extenders & Renovators etc.**

Puraflo Multiple Module System: The modular nature of the system provides maximum design flexibility for secondary and tertiary treatment across a range of applications. Additional modules can also be added to existing Puraflo systems to provide increased capacity where required.

Puraflo Peat Filter Bed: The peat media can also be housed in site constructed retaining structures depending on site-specific requirements.



Puraflo: Process Description

- Wastewater flows into a watertight primary/septic tank. The solids settle and the liquid effluent flows by gravity to a pump/sump chamber through an outlet filter.
- The liquid effluent is pumped intermittently to the Puraflo modules where it is dispersed evenly onto the surface of the peat fibre and percolates through the media.
- Treatment of wastewater within the system is achieved by a combination of unique physical, chemical and biological interaction between the wastewater and the fibrous peat media.
- Considerable BOD, TSS and NH3-N reductions are achieved and the system is also very effective in the elimination of enteric bacteria contained in the wastewater.
- The treated liquid emerges from the Puraflo modules and disperses into the ground through a percolation area or is collected for disposal by other methods.
- The Puraflo system is low maintenance and requires no desludging or backwashing.

Installation & Commissioning:

The Puraflo Community System is installed and commissioned by Bord na Móna Environmental Ltd.

Puraflo: The Benefits

- Simplicity of design, installation and operation.
- Secondary and/or Tertiary treatment.
- High treated effluent quality.
- Low capital and operating costs.
- Intermittent pumping to Puraflo means reduced power consumption & increased cost efficiency.
- No desludging or backwashing required.
- Flexible, modular design.
- Seasonal or intermittent use.
- Retrofits existing plants to improve effluent quality.

Warranty, Servicing & Maintenance

Bord na Móna Environmental Ltd. provide a 12 month parts and labour guarantee. The company also offers service inspection contracts designed to suit client's individual needs.

Tertiary Treatment

Further enhance the treated effluent quality with a Puraflo Tertiary Treatment option. The Puraflo system is ideally suited for tertiary treatment and can be included as part of a new treatment system or retro fitted to an existing treatment plant where a higher effluent quality is required for discharge.

Intermittent and Seasonal Use

The Bord na Móna Puraflo system is proven effective in situations of intermittent or seasonal loading. Due to the water binding properties of the peat, the media and consequently the microbial film do not dry out upon reduction or complete cessation of wastewater supply. This unique property, combined with the physical and chemical processes which take place in the peat ensure that a high level of treatment is maintained during variable loading conditions.

Optional Extras

- Pump Stations
- Nutrient Removal
- Telemetry
- Instrumentation

Performance (Secondary Treatment)

PARAMETER	INFLUENT	EFFLUENT
B.O.D (mg/l)	300	20
T.S.S. (mg/l)	200	30
NH3-N (mg/l)	30	5
Total Coliforms	1 x 10 ⁹	>99.9%
Pathogenic Bacteria **	Present	Absent

* CFU's per 100ml ** Including Salmonella, Staphylococcus and Shigella species, Pseudomonas aeruginosa and Sulphide reducing Clostridia

Puraflo System Design

POPULATION EQUIVALENT P.E.	MAXIMUM DAILY FLOW M ³ /d	APPLIED ORGANIC LOAD Kg/d BOD	NO. OF MODULES	ASSOCIATED SEPTIC TANK
20	3.6	1.2	8	5.6
50	9	3	18	11
80	14.4	4.8	28	16.4
100	18	6	36	20
150	27	9	54	29

