

# Innovative Eco-Efficient Solutions for Onsite Wastewater Treatment

Enviro-STEP Technologies is a company with over 20 years of expertise in designing and developing Onsite and Decentralized Wastewater Technologies. We believe that every technology dedicated to Onsite Wastewater industry requires simplicity, robustness, ease of operation while meeting the highest environmental standards. These are the principles we convey through our line of products.



#### Domestic Wastewater

Advanced Wastewater Technologies for Residential, Commercial, Institutional, Clusters and small Communities.

Enviro-STEP Technologies offers a full line of specialized products specifically designed for domestic wastewater applications.

From single dwellings to entire decentralized residential developments and small communities or any commercial sites such as campgrounds, RV parks, resorts, gas stations, schools, restaurants, etc. Enviro-STEP Technologies has the right solution for your domestic wastewater project. We offer simple, affordable and performing pre-engineered and packaged solutions meeting your environmental and financial objectives.

Our technologies are designed to be easy to operate and maintain. They offer superior performances in our tough Canadian climate conditions.



#### Industrial Wastewater

Simple and efficient processes for pretreatment or complete treatment of process water and water contaminated runoffs.

Enviro-STEP Technologies commercializes innovative and simple technologies engineered to handle wastewater from small to medium size food-processing plants, wineries, industrial site runoffs, leachate from mining and waste management sites, landfill areas and septage plants.

Our firm's innovative solutions put forward simplicity, robustness, performance and competitive pricing. Some of our technologies are offered in mobile containerized versions to accomodate remote locations.

Enviro-STEP Technologies R&D Group can provide wasterwater treatability essays to evaluate the compatibility of your effluent with our technologies.



#### Storm Sewer

## Simple and Natural Solutions for Storm Sewer Treatment

Enviro-STEP Technologies, specialist in phyto-treatment technologies, offers a whole line of constructed wetland solutions specifically developed and engineered for the treatment of stormwater runoffs.

Thanks to its entirely natural, simple and efficient processes that minimize the effects of impervious surfaces created with urban developments, the PHYTO-FILTER-S line of wetlands can be designed to remove suspended solids, phosphorus, heavy metals, and oil by-products.

#### OUR SERVICES

In addition to our treatment solutions, Enviro-STEP Technologies offers the following services :

- > Budget Evaluations
- > Support and Assistance to Consulting Firms
- > Field Supervision
- > Customer Service, Maintenance and Environmental Monitoring

#### **OUR FEATURED PRODUCTS**

#### PHYTO-FILTER

ENGINEERED WETLAND

> DOMESTIC > INDUSTRIAL > STORM SEWER WASTEWATER



Phyto-Filter is a constructed wetland solution mimicking mother nature's natural processes to achieve exceptional treatment performances. Simple, natural and very efficient for various types of pollutants.

Phyto-Filter consists of one or several watertight subsurface flow wetland cells in which specific plants and filter media are introduced into a performing natural biofilter. Effluent travels through the filtering matrix and plant root zones and gets treated via the combined effect of several natural phenomenons.

#### **ELJEN GSF**

PASSIVE COMBINED GEOTEXTILE BIOFILTER AND SAND FILTER > DOMESTIC > INDUSTRIAL WASTEWATER



ELJEN GSF modular geotextile biofilter combined with a sand filtration system developed by Eljen Corporation and distributed by Enviro-STEP Technologies. ELJEN GSF is 100% passive. No electricity. No mechanical parts.

Ideal for sites where simplicity and ease of operation are desired, ELJEN GSF produces superior effluent quality protecting water resources and the environment. ELJEN GSF is scalable to address individual residences to larger commercial and communal applications. ELJEN GSF modules are light weight and small in size allowing for fast installation and use in remote locations.

## FILTRO-FLEX

PREFABRICATED MODULAR RECIRCULATING GRAVEL FILTER > DOMESTIC > INDUSTRIAL WASTEWATER

Filtro-Flex is a preassembled recirculating gravel filter specifically designed in a light weight module capable of being delivered, lifted and installed easily at the job site. Each Filtro-Flex module has a capacity ranging from 1500 to 2400 L/d and is used in a multimodule configuration to match the desired flow rate. The increase of capacity of a Filtro-Flex project is very easy as modules can be added anytime making it evolutive at the same pace as your project



#### **BIO-REDOX**

HIGH STRENGTH PRETREATMENT UNIT > DOMESTIC > INDUSTRIAL WASTEWATER

Bio-Redox is a pre-engineered system used either as a high strength pretreatment unit or a completely mixed moving bed reactor. Powerfull, flexible and yet very simple, Bio-Redox uses completely mixed biological technology to perform rapid and efficient organic matter reduction.

**Bio-Redox** comes plug and play and fully assembled. It is offered in various configurations from standard to a **Bio-Redox Plus** version incorporating a moving bed fixed film media.



#### HYDRO-KINETIC

HYBRID ADVANCED BIOLOGICAL AND FIXED FILM REACTOR > DOMESTIC > INDUSTRIAL WASTEWATER



HYDRO-KINETIC is an hybrid compact preassembled bioreactor manufactured by NORWECO and distributed by Enviro-STEP Technologies. It combines classic extended aeration activated sludge with a final step of fixed film media biofiltration to achieve high treatment quality. HYDRO-KINETIC is compact, modular and scalable. It is offered, if required, with complete tertiary treatment including UV disinfection and passive phosphorus removal filters. HYDRO-KINETIC is CAN/BNQ 3680-600 certified and achieves Total Nitrogen removal up to 66%.

## STEP-MBR

GRAVITY FLUX MEMBRANE BIOREACTOR > DOMESTIC > INDUSTRIAL WASTEWATER

The STEP-MBR is a membrane biological reactor using the revolutionary design of the Alfa-Laval hollow-sheet gravity flux mambranes. The STEP-MBR is offered in various configurations such as preassembled pacplants, containerized mobile units or custom designed.



The STEP-MBR combines the principle of extended aeration activated sludge process with superior liquid/solid separation using gravity flux hollow sheet membrane modules. The STEP-MBR is one of the most simple MBR product on the market while achieving pristine effluent quality compatible with the most sensitive areas.