
Key feature:

“Utility Integration”

Transportable, Factory-built

Combined Potable Water Treatment & Wastewater Treatment System

This “green” technology combines a membrane based potable water treatment & storage system with an environmentally friendly wastewater management system into **one singular stand-alone appliance**.

Potable Water Treatment and Storage System:

- Raw water storage tank system (see sizing on other page)
- Membrane based filtration system – NSF certified c/w 99.999% contaminant removal
- Treated water storage tank system/surge tank (see sizing on other page)
- Proprietary, intrinsically safe duplex UV disinfection system
- UV intensity sensor and solenoid shut-down if UV - bulbs fail or power to UV disinfection system is interrupted.
- Residual Disinfection – Chlorination System (optional)
- Pressurized potable water connection to utility user, eg. temporary camp installation (optional)



Wastewater Treatment and Management System

- The treatment capacity of the wastewater management system is matched to the capacity of the potable water system; it has a custom designed dual chamber septic tank, treatment system, pumps, controls and alarms. Depending on unit size, it can accept between 3000 liters and 5000 liters of raw sewage per day for treatment.

Optional Off Grid Power Supply

- For custom applications, the integration of an off-grid power module (Diesel engine c/w renewable power back-up system and cycle charging option) is available. A custom design for each application will be required.

The combined unit is ideally suited for such installations as:



- Temporary work camp installations for oilfield, mining, exploration and remote research projects
- Remote tourism developments
- Temporary construction sites, spill clean-up sites, short term environmental remediation sites
- Site supervision office for construction camps or (winter) road construction
- Fire fighting camps or disaster relief camps
- Guardhouses for traffic monitoring or site security

Two core models are available with the following capacities:

Unit	Supply of Potable and Wastewater services for :	Capacity	Dimension	Potable Water Storage and Treatment Capacity	Septic tank Capacity
Combo Blue 15 / WTS 3000	Public Washrooms (Toilet and sink only -- no showers)	75 person	20' ISO container	1500 liters untreated water 18 LPM cont. treatment 1500 liters treated water	Combined capacity of 6,600 liters
	Construction office (showers on site)	20 person			
	Guardhouse				
	Temporary, semi permanent camp	7 person			
Combo Blue 20 / WTS 5000	Public Washrooms (Toilet and sink only -- no showers)	150 person	40' ISO container	3000 liters untreated water 36 LPM cont. treatment 3000 liters treated water	Combined capacity of 10,000 liters
	Construction site (showers on site)	40 person			
	Temporary, semi permanent camp	15 person			

Additional configurations are available upon request.

For example: the Combo Blue 20 / WTS 5000 can be equipped with an integrated off-grid power module.

CONVENIENCE:

The seamless integration of a **reliable potable water treatment technology** with the convenience of an environmentally friendly **wastewater management system** creates a **stand-alone module** that can easily be supplied to any remote installation site.

- The potable water and wastewater treatment unit is factory assembled and is delivered in a **ready-to operate condition**.
- No requirement for installation of underground storage tanks, septic tanks or heat-traced piping systems.
- If required, an additional disinfection component can be added to the wastewater treatment system.

Treatment results of the integrated wastewater treatment system depend on the incoming sewage quality.

On average, the treatment should result in the following discharge quality:

BOD	below 10 mg/l
TSS	below 10 mg/l
Coliform	99% removal of fecal coliform



TECHNOLOGY:

The transportable “integrated utility technology” was developed between 1999 and 2003 – partially supported by Canada Mortgage and Housing Corporation (Research Division), Industry Canada and the National Research Council.

In 2003, the equipment was first introduced into the western Canadian oilfield servicing industry. Presently, the associated Alberta based leasing company has on average 80 utility units of various configurations under lease to such companies as: EnCana Corporation, Apache Corporation, Fairborn Energy Trust and numerous others.

- In 2000, the EcoNomad™ integrated utility technology received the Canada Mortgage and Housing Millennium Housing Award (Technology Category).
- In 2007 the integrated utility technology was selected as the national winner (Canada) in the international “Energy Globe” sustainable technology competition sponsored by the European Parliament in Brussels.

CONTACT:

DESIGN, MANUFACTURING, LEASING & SALES:

Architectural & Community Planning Inc.

261 Albany Street
 Winnipeg, Manitoba, Canada
 R3J 2A9
 Ph: 204 831-0216
 E-mail: Staschik@mts.net

