



ECONSE



ADVANCED WASTEWATER PURIFICATION

Destroys PCBs & POPs onsite
No Hazardous Waste or Inceneration

For Municipalities, Small Communities & Industrial



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ECONSE 250R: PCBs & POPs Destruction & Removal System

The Challenge:

The removal and decontamination of PCBs and POPs from water is a very difficult and expensive process, which creates additional pollution & waste due to the use of Incineration, Chemical Mineralization, and Reverse Osmosis technologies.

ECONSE was asked by a Canadian Government Agency to propose a solution and demonstrate our capability to destroy PCBs in highly contaminated water. Additional goals of the project included:

- Dramatically reduce existing process costs
- Provide an ultimate, on-site remediation solution for the destruction of PCBs
- Use advanced technologies with no hazardous byproduct(s)
- Provide a chemical free, sustainable and eco-friendly solution
- Comply and meet with safety discharge limits & environmental regulations
- Provide a fully Automated Unit with remote monitoring & control

**The water was contaminated with 120 (+/-) ug/l of PCBs & other contaminations.
The “Safe for Discharge” requirement (non-drinking water) is 1 ppb (1µg/l).
Our challenge was to destroy PCBs below “Non-Detectability Level”.**

Econse Solution:

The Econse 250R PCB & POP Destruction Unit uses an advanced chemical free process to destroy PCBs and POPs to below detectability “On-Site” without the need for any incineration or use of chemicals.

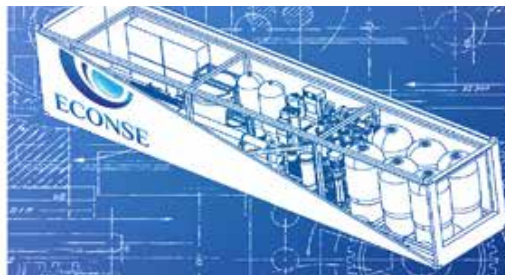
The ECONSE-250R produces a water quality that meets and exceeds the Safe Industrial Discharge required by the Ontario Ministry Of Environment MOECC at a fraction of the cost of other traditional treatment technologies.

The Results:

ECONSE performed a demonstration of our technology at our facility in Toronto, Canada. All PCB and other hazardous contaminations were destroyed to below Non Detectability (0.02 ug/l), and water was made safe for discharge. Test results were verified by an independent certified 3rd party laboratory.

Our findings represent a great leap forward in technology and can provide solutions for many other applications such as the destruction of POPs and Chemical and Biological weapons.

Please contact ECONSE for more information or to request a Pilot Study



ECONSE 250R:

Benefits of the ECONSE 250R include:

- Destruction of PCBs & Contaminations to Non-Detect Levels
- Sustainable Environmentally friendly Process
- Process creates no additional pollutants or waste
- “On Site” total destruction and remediation solution with no off-site processes
- Total remediation of contaminated water and any generated sludge
- Economically viable for significant budget saving and reduction in cost of remediation
- Destroys and eliminates other possible contaminations including Trichlorobenzene (TCB), Trichloroethylene (TCE), and Trichloroethane (TCA) to less than 1 ppb

Each component in our Integrated system has been rigorously tested and used for many years in a wide range of other industries. Additionally, our system includes our fully automated process to help operators in running the Unit more smoothly, including:

- No Off-Site Remediation required, no replacement of filters, incineration, etc.
- Remote Process Monitoring through PLC and SCADA interface
- Real-time effluent quality control monitoring
- Real-time data logging capability and Real-time operation reports
- SCADA communication and automatic alarms through phone or e-mail
- Alerts for Preventative Maintenance schedules
- Easy to operate with low operation and maintenance costs, low life cycle costs
- Optional automation of all ancillary, upstream and downstream processes

NOTE: Images are for concept only. The photos are of the ECONSE WATERHORSE, Drinking Water site installation TEXAS 2014.

