

The Coalition of Haliburton Property Owners' Associations - Eco Ethic Research

The C.H.A. takes the issue of our credibility very seriously. We believe that we must at all times act in such a way to maintain the very high degree of credibility that we have achieved with our members, the community we serve and government. As such we are very careful in checking and double checking all information we provide.

Here are some of the steps we took before we came out with our recommendation to our members re Eco Ethic Septic Treatment Product (EEST):

- We interviewed various wastewater treatment experts that had experience with the product and other products.

A number of the people we interviewed had done studies on the product (test results later in this document). Dr E. Craig Jowett the founder and President of Waterloo BioFilter had years of experience with the product and had conducted numerous efficacy studies on the product and competitive products. We also talked to academic experts such as Dr. Brent Wootton, Fleming College's Alternative Wastewater Treatment (CAWT) Director and Senior Scientist. Some of the info gleaned from these experts is as follows.

- The product works as advertised.
- When asked about competitive products, none of the experts we interviewed said anything negative, but what they kept repeating is that the Eco Ethic Product works.
- The Eco Ethic product has a high concentration and the right mix of beneficial bacteria and enzymes to:
 - a. kick start a system after the owner has been away (Spring, holidays etc.),
 - b. deal with fats, oils and greases (FOG),
 - c. breakdown Cellulose Fibre from toilet paper and some of the foods such as whole wheat and broccoli (we do not have the right bacteria to break fibre down – but Eco Ethic Septic Treatment product does),
 - d. supplement the bacteria that come from our gut but are killed off by products such as prescription drugs, antibacterial products, supermarket detergents, and dishwasher rinse aids, etc.
- We interviewed septic pumpers that have been recommending the product for years. While they did have a vested interest, it is a small part of their revenue and a number of the folks that we interviewed have excellent reputations for integrity. All spoke highly of the product and its efficacy.
- Verified that EEST is registered under Environment Canada's **Environmental Choice^M Program Certification Criteria Document** and is entitled to use the **Eco-Logo symbol** as a result. In order to obtain that registration, third party testing of the product is required and must demonstrate that the product:
 - *is biologically based,*
 - *is not toxic,*

- *is not harmful to humans, riparian species and aquatic species,*
 - *does not accumulate in the environment,*
 - *be accompanied by instructions for use and disposal, and*
 - *is **efficacious, meaning it actually works to decrease the waste materials that are present and helps to maintain a clear septic tank environment.***
- We were able to get our hands on some actual test performance conducted privately by a major septic system manufacturer. While proprietary info, the manufacturer agreed that we could share these results.

Test Performance

After bio-augmenting with Eco Ethic Septic Treatment analytical results showed drastic improvements in effluent quality as shown in Table 1.

Explanation of Terminology

- TKN - Total nitrogen - a very important nutrient for plant growth in lakes.
- TSS - the total suspended solids, the tiny bits that do not sink or float but carry through systems causing biomat buildup in tile beds.
- BOD - biochemical oxygen demand, this is the amount of dissolved oxygen that must be present in water in order for microorganisms to decompose the organic matter in the water, used as a measure of the degree of pollution. Also called **BIOLOGICAL OXYGEN DEMAND**. BOD uses up oxygen in our lakes - less for the fish! Can also lead to acidification.

Table 1 – Treatment Data Summary Table (table edited for brevity only)

	cBOD (mg/L)	TSS (mg/L)	TKN (mg/L)	NO _{2,3} -N (mg/L)
<u>Before Bio-Augmentation</u>				
Raw sewage	318	200	93	0.6
Septic effluent from fully functioning septic system	148	75	78	0.6
% Removal	54%	62.5%	Nitrification Efficiency=0.76%	
<u>After Bio-Augmentation with EcoEthic Septic Treatment (EEST)</u>				
Septic effluent from fully functioning septic system	6	6.8	5.5	21.5
% Removal	97%	91%	Nitrification Efficiency=79.0 %	

The bottom line is that the C.H.A. spent a lot of time doing it's homework before we recommended the Eco Ethic Product - which we do unreservedly. Our core mandate involves Protecting our Lakes. Using this product and following the tips in our DVD "Poop Talk" are major steps that property owners can take to help protect their lakes.

Recommending this product to your members is an important step that you can take.

Paul MacInnes – Chair

