

A new model for sewage treatment in the Resort Village of Chitek Lake

Table #6 - PARCS Convention 2010 - Members Fair

Background

The Resort Village of Chitek Lake received funding from the Building Canada Fund to implement a new system for treating sewage. The Resort Village, along with the RM of Hoodoo, will be piloting this process, as they are the first in Saskatchewan to utilize it.

The Resort Village's administrator described the mechanical process as beginning with the sewage hauler bringing the waste water to the plant and pumping it into the first of 10 tanks. The first three tanks agitate the sludge, and then it is cleaned and ultimately discharged into a slough. The Village ultimately plans to use the treated effluent to irrigate a nearby tree nursery.

The process

Ecolibra describes themselves as "a Saskatchewan based company with decades of experience in multiple wastewater systems (e.g. lagoons, wetlands, chemical, mechanical)" and describes the new wastewater recovery and treatment process, called R2S, as "economically attractive and environmentally sustainable".

The system uses treatment processes that have been proven for decades yet still include innovative and advanced aspects. For example, the process does NOT use:

- Bacteria of other processes that emit green house gases,
- Toxic or hazardous chemicals, or
- Complicated, high maintenance filtration or membrane systems.

The system is called R2S and is a stand-alone packaged plant that treats municipal sewage and recovers valuable, odour-free bacteria-free water and fertilizers.

The treated effluent is described as surpassing regulatory requirements and as being certified and backed by government. Since the system does not emit greenhouse gases, it generates carbon emission credits that can be sold for profit.

EcoLibra compares their R2S system to standard wastewater/lagoon systems as follows:

- "Environmentally friendly and sustainable,
- Lower in capital costs and overall lifecycle costs,
- Producing extremely clean, safe, bacteria-free, reusable waste water,
- Automated, reliable and simple to maintain,
- Having a tiny footprint (plant is 2400 sq feet),
- Reliable in quality,
- Easily scalable and flexible for future design changes, and
- Unaffected by extreme cold or hot weather."

The Resort Village of Chitek Lake and EcoLibra see wastewater as the untapped resource of the future.



Inside R2S Trailer