

Council hears water system delegations, questions Public Works

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By Nelson Phillips

South Bruce Peninsula entertained two separate presentations from water/wastewater system presentations on Tuesday Feb 3, from companies that couldn't understand why their respective systems hadn't been on the Town's list of processes to investigate.

Josh Clark, of C&M Aquatics Management Group Ltd., which is locally based out of Owen Sound, discussed his Blue Frog system, an innovative process that "eliminates the need for sludge removal" by utilizing a modest three horsepower electric motor to move 7 million US gallons of water per day.

Clark told South Bruce Peninsula council that he was "mystified" that the Blue Frog system wasn't on the list of processes to consider when the Town's Public Works department was researching new processes.

Clark says that the Blue Frog system was presented to South Bruce Peninsula Public Works Manager, Tom Gray, in late summer 2013.

Clark noted that the Blue Frog system had Ministry of the Environment (MOE) approval for numerous systems operating in Canada - notably, in nearby Markdale, and Stratford PEI. Clark also said that there are 26 Blue Frog systems in operation in the US.

Clark says that his system, while relatively new and progressive, "digests" sludge that accumulates at the bottom of sewage lagoons like Wairton's, therefore eliminating a "significant" maintenance cost to the existing infrastructure, an estimated \$40,000-\$50,000 reduction.

Additionally, when compared to the Town's already chosen Moving Bed Biofilm Reactor (MBBR) process, the Blue Frog system would amount to an approximate "50% capital cost reduction."

Clark added that the tiny three horsepower motors make the system highly efficient, and that the systems had no issues operating year round, in sub zero temperatures of -21 degrees Celsius.

Clark estimated that the hydro costs to the Town would equate to an approximate \$37,500 - based on numeration from the Stratford PEI system, which draws an approximate \$75,000 worth of hydro annually. Clark noted that hydro costs on Prince Edward Island were about "twice as much" as what customers pay locally.

Clark says that an extended power outage would be one of the only things that could present his system with a problem, as the eight-foot wide circular floating mechanisms could freeze in.

Furthermore, Clark suggested that the Blue Frog could be used as a "chemical free way to deal with algae," and because the system is designed and manufactured in Owen Sound, that it was a "perfect opportunity to babysit this project. We're located 35 minutes down the road," added Clark.

Councillor Matt Jackson applauded Clark for his presentation, and noted that he had been involved with discussions trying to convince government to try a new progressive approach, such as Blue Frog.

"Sometimes if it's not a windmill or a solar panel, they don't want to talk about it," said Jackson.

The second delegation saw Martin Hildebrand of Nelson Environmental Inc., present his company's SAGR system, a process that sees additional beds built in between the lagoons and existing filters.

Hildebrand told council that the SAGR system would require "minimal changes to existing Wiarton infrastructure."

Hildebrand also noted that the Ontario Clean Water Agency (OCWA) who currently holds the contract to Wiarton's water and wastewater management is already familiar with SAGR, which is in operation in a substantial number of municipalities in Canada and the US - and with two other international projects in Brazil and Saudi Arabia.

"We're from Manitoba, the system was developed in Manitoba and Saskatchewan where we have even colder temperatures than Ontario," added Hildebrand.

Nelson Environmental Inc.'s website described the SAGR system as "a clean stone bed that is fully aerated using the [a] patented aeration system. Water flows through the substrate horizontally or vertically. A layer of insulating mulch on the surface prevents ice formation in the bed, allowing the system to treat wastewater that is near freezing (<0.5°C)."

Hildebrand says that the SAGR system requires a stone bed be laid as part of construction, and noted that he saw "a few quarries" on the way up, which would lend well to the project by supporting other local business.

Perth, and Glencoe, ON also use a SAGR system, and were referenced by Hildebrand during his presentation to council.

Following the two hour long delegations, council inquired as to why the two innovative processes were not investigated by Public Works, and why a "dated" process like a MBBR was automatically chosen by the Towns' Engineering consultant.

Gray told council that the engineer had issues with both proposed systems, noting that the Blue Frog system raised "a lot of technical concerns... For South Bruce Peninsula, [the consultant] doesn't feel it will stand up."

Gray outlined issues with the additional footprint that the SAGR system would require, and noted that the consultant was concerned that the SAGR system would be located at the end of the filtration process.

Gray also said that the SAGR system and the MBBR process showed "not really any cost difference."

"You're not calling them back," said Jackson. "The Engineer had tunnel vision... Wasn't even interested what they had to say."

Councillor Vukovic was concerned that Public Works doesn't have to come to council to make a decision regarding the engineering consultants findings, as part of the current purchasing policy.

"How do you invite people when you don't get presentations first?" asked Vukovic. "Is this written in stone? Can we overturn the decision?"

Coun. Matt Jackson shared Vukovic's concerns and added that companies "shouldn't have to come to council to be heard."

Mayor Jackson told Gray that she felt the two presenting companies were "jumping up and down saying don't go down this road, it's archaic."

Jackson concluded by noting that the situation was "very alarming."

Council passed a resolution that asks the Towns' Engineer to present the reasons behind his decision to council at a future date.