



# NEWSLETTER

## Special points of interest:

- Profiles
- Challenges in Georgian Bay
- OOWA News



## Gunnell Engineering Ltd.

Island properties are often a challenge for sewage system designers and contractors. This year, we were involved with several new septic system designs for recreational properties in the Georgian Bay area. One of these projects was Camp Kitchikewana located on Beausoleil Island. The Camp required upgrades to their sewage system, and several challenges were encountered during the construction process. Fortunately, it was a team effort that made this project a success. Read about our site experiences on page 3. More detail on the YMCA project can be found in the OOWA Onsite Summer 2015 newsletter.

The annual OOWA conference last March was attended by our staff, and Eric gave a presentation on septic site

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assessments. The OOWA Central Ontario Regional meeting was held last September, and both Tom and Eric spoke on project challenges.

We also had a booth at the very busy Spring Cottage Life Show, and we were part of the trade show at Camping in Ontario Campex and at several regional shows.

Have a property with limited space for a septic system? One option may be the ELJEN GSF System. The ELJEN GSF System recently obtained a BMEC authorization. It is relatively easy to install and requires simple maintenance. Read about the ELJEN GSF System on the Profile page.

We were deeply saddened to hear of Anthony's passing. Anthony was well recognized as a dedicated professional

Volume VII, Issue I

in our small industry. We will miss our dear friend.

We wish you a prosperous 2016. Your comments and feedback are always welcome.

*Elizabeth Lew, Editor*

## Inside this issue:

- CAN / BNQ Deadline 1
- Installer Profile 2
- Eljen GSF - New BMEC 3

## CAN/BNQ 3680-600 - Jan 1, 2017

Starting on January 1, 2017, certification for residential wastewater treatment technologies, based on the new CAN / BNQ 3680 – 600 standards (subject to conditions included in OBC 8.6.2.2), will come into effect. CAN / BNQ 3680 – 600 for 'On-site Residential Wastewater Technologies' is the new national standard for testing residential wastewater treatment technologies. This standard will replace the current criteria for treatment units set out in the OBC, and the list of treatment units found in Supplementary Standard SB-5 which are deemed to meet these Code requirements. Existing Treatment Units listed in MMAH Supplementary Standard SB-5 are still

in compliance, but SB-5 will be revoked on January 1, 2017. Manufacturers have until January 1, 2017 to ensure that the new testing requirements are met to enable them to continue selling their treatments units in Ontario.

The new CAN / BNQ 3680 – 600 has much higher standards than the previously accepted NSF40 standard as it now includes cold weather testing which better reflects Ontario climatic conditions. The only testing facility taking on new applicants is the BNQ facility in Quebec. Fifteen months of testing / documentation is typically required.

For further information please visit web site: [www.bnq.qc.ca](http://www.bnq.qc.ca).



# NEWSLETTER

## Profile - Contractor / Installer – Smith Excavating



**Mike and Lesley Smith**

Smith Excavating, Grading & Septic Services is a second generation, family run business that has been in the community for over 40 years. J. Barry Smith bought his first septic pumper truck circa 1971 and started pumping tanks in Kleinburg and surrounding areas. From there he evolved into septic system repairs and installations as well as basement excavations. In 1988 Mike joined his father full-time and worked together for the next 15 years building septic systems, digging basements and pools, and maintaining septic systems. After his father's death in 2002, Mike chose to continue on with the family business in his father's memory but with his own vision. Mike applied his extensive knowledge and expertise in the area of septic systems and general excavation to the new company. He saw the potential of evolving the company to be so much more than just "septics". Over the last 13 years, together with his wife,

Lesley, and his core crew of employees, Mike has expanded Smith Excavating to offer more to their customers. Smith Excavating specialize in new home builds to offer the homeowner, or general contractor, their services of site preparation, demolition and disposal, construction driveways, foundation excavation, waterproofing and drainage, retaining walls, site cleaning, septic system design and installation, utility trenching, grading, and landscaping. Mike also advises that they offer all of these services individually, both to commercial and residential locations, and adds that although the company has grown so much, there is still a pumper truck running every day, cleaning and maintaining septic tanks just as it started in 1971. They believe that there is so much value added to their customers to offer them the benefit of their installer maintaining their septic system. Mike and his crew are continually upgrading and expand-

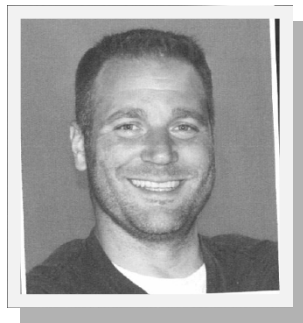
ing their knowledge base by attending workshops, courses and seminars about new construction practices for septic systems, landscaping and drainage solutions.

They are M.O.E.C.C. and M.M.A.H. qualified and licensed excavators, septic system designers, installers, inspectors and sewage removal contractors, providing services in Simcoe County, York and Peel Region. They have emergency 24 hour on-call service available

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## Anthony Acchione - Sadly missed



On August 17, 2015, our dear friend and colleague Anthony Acchione passed peacefully at Royal Victoria Hospital after a brave battle with cancer.

Anthony and Vanessa started Acchione Brothers Construction in 2010. Anthony was profiled in

our November 2012 newsletter and widely recognized as being involved in the septic industry as not only a septic installer, but as OOWA Board member and strong advocate for our industry.

Today, Acchione Brothers Construction continue to provide a wide range of services under Vanessa Acchione (vanessa@acchionebrothers.com), president of Acchione Brothers. They are certified septic installers experienced with numerous types of septic systems.

Acchione Brothers can be reached at 519-941-6407 or contact Peter

Roque  
(peter@acchionebrothers.com).



## Profile - ELJEN GSF System

Last September, the ELJEN GSF System received BMEC approval #15-02-376 for use as an alternate to a Class IV sewage system. This entirely passive gravel less system relies on a two-step treatment process to bring the effluent to Level IV (tertiary) quality. The ELJEN GSF System includes a combination of aerobic fixed film filtration and sand filtration process. The first step



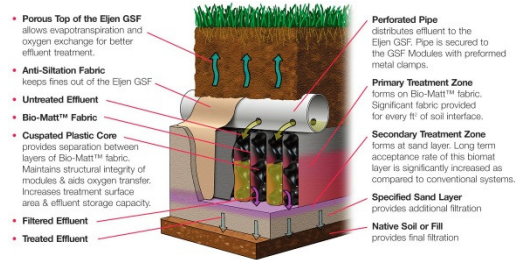
takes place in the GSF modules that receive primary effluent from a septic tank. The number of GSF A42 modules is based on the daily flow rate. Each GSF module has a unique accordion shaped alternating textile fabric layers for bacterial development and cusped plastic core for air transportation and water retention. Primary effluent is dispersed over the modules using

standard perforated pipes. The specified sand layer directly under and between the modules plays an important role in the final polishing of the treated effluent. This results in a very low effective loading rate on the soil with highly treated effluent assuring very long life expectancy and minimal biomat development on the native soil. More than 100,000 ELJEN GSF Systems have been installed in North America since the early 1980's with an enviable reliability and performance track record. ELJEN GSF is one of the few systems that can demonstrate performance data in severe winter conditions with no control of the influent temperature.

Enviro-STEP Technologies, the Canadian Distributor for Eljen and a member of OOWA, is proud to introduce the ELJEN GSF System in Ontario. The ELJEN GSF System is economical, completely passive with no mechanical parts or power requirements, is easy and fast to install, and requires very simple maintenance. Enviro-STEP Technologies believes that ELJEN GSF System will bring simplicity and peace of mind to many decentralized families and small commercial sites.

A key advantage of the ELJEN GSF system is that a 15 m mantle imported sand is not required.

For further inquiry, please contact Enviro-STEP Technologies, Domenic Mercier 418-915-6812 or [dmercier@enviro-step.ca](mailto:dmercier@enviro-step.ca).



eljen Geotextile Sand Filter

## Not Your Typical Sewage Treatment System Installation - YMCA Camp

YMCA Camp Kitchikewana is a seasonal youth camp located on Beausoleil Island within the boundaries of Georgian Bay National Park.

Gunnell Engineering Ltd. was engaged to assess and make recommendations for sewage system upgrades for two of the existing sewage systems that had failed. Bionest tertiary sewage treatment systems with discharge to subsurface dispersal fields were chosen allowing the design of the two replacement systems to fit into the same footprint of the original systems.

The installation of the Bionest tertiary sewage treatment systems at the Camp was far from a typical installation. There were many limitations and challenges associated with the project, including:

- Limited allowable use of land area was the greatest physical hurdle. Tree re-

moval or damage to trees or undisturbed areas was not permitted.

- Since the project was located on Parks Canada property, construction of the replacement sewage systems could only take place in the areas already disturbed, due to the pres-

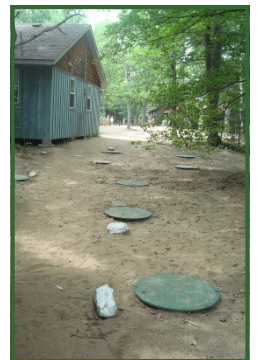


ence of potential relics and antiquities. Continuous watch for artifacts was necessary.

- All sewage treatment tanks, materials, and construction equipment were required to be transported to the Island by barge.
- The limitations of movement of equipment and materials was made much more difficult because of nar-

row pathways and time consuming as construction workers were forced to find alternative routes and 'work around' around animal habitat.

- Due to access limitations on the Island, plastic tanks were used. This made it easier for tank movement, however an increased number of tanks were required due to the limited capacity of plastic tanks.



Despite the above noted limitations and challenges, the Bionest tertiary sewage treatment systems were successfully installed on schedule and on budget.



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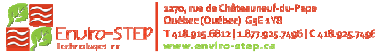
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**Industry News**

Eljen GSF System has been granted BMEC Authorization #15-02-376. The Eljen GSF system consists of GSF A42 modules, an anti-siltation filter fabric and a layer of specified sand. The system is ideal for challenging applications, which does not require a mantle.



Cromer Advanced Septic Systems is now the distributor for MicroFAST sewage treatment systems in Ontario. For further information please call John Martin 226-920-4926 or john.martin@cromar.ca.



Orenco is pleased to announce that John Doner is the new Central Ontario representative for the Advantex Treatment Systems. John can be contacted through The Septic Store at (519) 807-4414 or email: jdoner@thesepticstore.com



**Ontario Onsite Wastewater Association News**

The Annual OOWA Conference was held at the Sheraton on the Falls last March where Eric gave a presentation on "Best Practices for Site Assessment & the Septic Test Pit investigation". This well attended annual event is an opportunity to network with other professional in industry, and learn of new products and available technologies.

We also were pleased to have participated in the Central Ontario Regional Meeting held at the Innisfil Municipal Offices on September 22, 2015. Tom Keane presented "Best Practices with Filter Beds" and Eric talked about the challenges with the YMCA Camp Kitchikewana septic system upgrade installation. Copies of both presentations are availa-

ble on our website, or contact us for a copy. See our Camp Kitchikewana article of Page 3.

We look forward to attending the upcoming OOWA Annual Conference in Kingston on March 6-8, 2015.



**Who we are...Gunnell Engineering Ltd.**

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**Upcoming Events:**

**OOWA**

Annual Conference and Trade Show, Kingston  
March 6 - 8, 2016

**National Home Show**

Direct Energy Centre  
Exhibition Place, Toronto  
March 11 - 20, 2016

**Spring Cottage Life Show**

International Centre  
April 1 - 3, 2016

**W.E.A.O. Technical Symposium & O.P.C.E.A. Exhibition**

Scotiabank Convention Centre  
Niagara Falls  
April 10th - 12, 2016