

Kansas Small Flows Association

Courtyard Conference Center
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Onsite Treatment System
Performance & Maintenance
Monitoring & Tracking

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Onsite Wastewater Treatment Systems Monitoring & Tracking

“History has proven that onsite wastewater treatment systems that are maintained in accordance with Regulations and Manufacturer specifications reduce the risk to public health and the environment.”

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State of Kansas

Department of Health & the Environment

Bulletin 4 – 2, March 1997

Minimum Design & Construction of Onsite Wastewater Systems

Page 13 – Maintaining Onsite Wastewater Systems

Minimum annual criteria include

A file containing records of repair, pumping, site plan of the system, and other pertinent information

SOME TYPICAL BARRIERS TO USE OF A MONITORING SYSTEM

Who is to keep these records?

Who owns these records?

Who has the legal liability to ensure that records are kept?

What about Federal and State Privacy Laws?

Who is qualified to conduct the maintenance?

Who has legal access to these records of privately owned systems on private land?

Does the lack of maintenance contribute to or cause a health hazard?

What is the process to respond to problems?

Resource allocations of government departments to respond malfunctions and system lack of maintenance?

What are the economic considerations to onsite wastewater system monitoring & maintenance tracking? (i.e. Who Pays?)

Low Confidence by Regulators in:

Industry participants

- designing
- installation
- Maintenance

Property Owners to maintain & Keep Records

Local Governments have concerns for subdivisions based on using onsite systems due to

- (a) Regulator's low confidence
- (b) liability and due diligence resulting from concerns about lack of maintenance causing public health risks.

SOLUTION

1. Formalize onsite wastewater participants education and training for site & soil assessment, site system design, installation and maintenance to confirm technical skill set.
2. Formalize onsite wastewater participants registration for accountability.
3. Cost effective, Onsite system monitoring and maintenance tracking system. (a.k.a. Central Registry) Cost effective to State and Local governments and the consumer.

The CIMCOR Central Registry Offers a
Secure Online Information Database for

ALL

Onsite Wastewater Systems Installed
Within A Stated Region / District / County

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Central Registry for Onsite Wastewater Treatment Systems

**Designed to assist Regulators and Local Government to
regulate onsite wastewater treatment systems with
minimal involvement**

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Maintenance Inspection Agreement

Between Property Owner and the Maintenance Provider states

1. States that the onsite system is on an online monitoring & maintenance tracking system and who has what access.
2. Maintenance Schedule
3. Monthly Monitoring costs, if any
4. Recording Keeping on behalf of owner
5. Recognizes that data is the property of the system owner
6. Fees and charges for maintenance
7. Rights to property access to conduct the maintenance
8. Compliance to Occupational Health (workers compensation)
9. States who has viewing privileges and for what information
10. States who can add details, data, drawings & pictures to the website

Central Registry for Onsite Wastewater Treatment Systems

All Contact Info

Owner Name
Tennant Name
Installation Address
Telephone Numbers
E-mail Address

Wastewater System Info

Brand
Model
Installer
Maintenance Provider
Designer/Engineer

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The background features a faint, light-colored grid pattern overlaid on a dark gray background. In the center, there is a faint image of a surveying instrument, possibly a theodolite or a similar precision instrument, mounted on a tripod. The instrument's lines and structure are visible, extending across the grid.

Central Registry for Onsite Wastewater Treatment Systems

***COMPLETE HISTORY
OF
MAINTENANCE & NOTES***

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MAINTENANCE PROVIDERS

ARE ABLE TO

- ◆ View important information on every onsite Wastewater system installed in their jurisdiction “at a glance”
- ◆ Receive automatic notification by e-mail of annual/6 month maintenance requirements of every system in their jurisdiction
- ◆ View all Maintenance Provider notes “at a glance”

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MAINTENANCE PROVIDERS

ARE ABLE TO (continued)

- ◆ Track trends in previous maintenance requirements pertaining to each specific installation site
- ◆ Make comparisons of different designs of onsite systems based on end users (eg: restaurants, schools, industry, residential)
- ◆ Track trends in installation concerns pertaining to specific installers

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MAINTENANCE PROVIDERS

ARE ABLE TO (continued)

- ◆ Add and maintain notes to specific onsite systems
- ◆ Ensure any Maintenance Agreement is in place for all onsite systems in their jurisdiction
- ◆ Ensure onsite systems are maintained in accordance to Regulations / Guidelines / Manufacturer's Instructions
- ◆ Receive notification of past due scheduled maintenance

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How it Works

Information is supplied from any one of:

Regulator

Designer

Installer

Maintenance Provider

CIMCOR uploads information on data server for
24/7 accessibility

Updates in owner information/maintenance events are
uploaded from Maintenance Provider reports

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Notifications Examples

1. Two weeks prior to date of next required maintenance event
 - Reminder Email/FAX sent to Maintenance Provider
 - Notification Email sent to Regulator if maintenance not conducted within a specified time period.
2. Two weeks prior to expiry date of any Maintenance Agreement
 - Reminder Email/FAX sent to Maintenance Provider
 - Notification Email sent to Regulator if not in place with a specified time period.
3. Two months after expiry of Maintenance Agreement if new agreement not reported
 - Reminder Email/FAX sent to Maintenance Provider
 - Notification Email sent to Regulator

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Regulators Benefits

1. Have viewing privileges to all systems within their jurisdictions for data base collection.
2. Be contacted ONLY when their involvement is required to address health hazards or enforcement action is required.
3. Confidence that onsite wastewater systems are being managed for the long term.

Local Government Benefits

1. Can create subdivisions using onsite wastewater systems as risk management issues are properly addressed.
2. Bylaw enforcement officers are ONLY involved when needed for difficult situations
3. Land Use Planning and Development can occur more readily as the costs associated with onsite wastewater systems are carried by the user and the local government's tax base as it is with the expensive city sewer services.

2 Types of the GUARDIAN® by Pinnacle

Off-Line

This is for systems where there is no onsite data logging (event recording) telemetric panel. All other features are included – Notifications and Record Keeping

On-Line

This is for systems where there is a onsite data logging (event recording) telemetric panel.

What it Looks Like

**YOUR
LOGO HERE**

Home

[Home](#) | [Reports](#) | [Admin](#) | [Logout](#)

Logged in as:
Muni C Pality
[\[edit profile \]](#)

Plants

Province -- All --

Serial Number

Found 3 plants

Actions	Serial Number	Status	Dealer	Maintenance Provider	Owner	Tenant	Installation Address
View Detail	01-02-1234 MicroFAST® Activation: January 21, 2006	Active	Pinnacle-Cambridge P: (519) 212-7442 F: (519) 653-5338	Pinnacle-Cambridge S: (519) 212-7442 P: (519) 212-7442 F: n/a	John Martin H: (519) 123-1234 C: n/a	Billy-Bob Homeboy H: (519) 653-6336	790 Industrial Rd Cambridge, Ontario
View Detail	1111113 MicroFAST® Activation: n/a	Active	Pinnacle-Cambridge P: (519) 212-7442 F: (519) 653-5338	Pinnacle-Cambridge S: (519) 212-7442 P: (519) 212-7442 F: n/a	Test System H: n/a C: n/a	n/a	, Ontario
View Detail	1111114 MicroFAST® Activation: December 26, 2006	Active	Pinnacle-Cambridge P: (519) 212-7442 F: (519) 653-5338	Pinnacle-Cambridge S: (519) 212-7442 P: (519) 212-7442 F: n/a	Billy Joe Jim Bob H: (519) 653-6336 C: n/a	n/a	Centre of the Universe Earth Milky Way, Ontario

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YOUR LOGO HERE

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Home | Reports | Admin | Logout

Logged in as
Muni C Palty
[edit profile]

Plant Detail - MicroFAST® 0.50 - S/N 01-02-1234 **STATUS: Active**

Site Information

Maintenance Provider
Pinnacle-Cambridge
S: (519) 212-7442
P: (519) 212-7442
F: n/a

Installer
Pinnacle-Cambridge
S: (519) 212-7442
P: (519) 212-7442
F: n/a

Owner
John Martin
H: (519) 123-1234
B: (519) 987-6543
C: n/a
F: n/a
E: centre@universe.com

Tenant
Billy-Bob Homeboy
H: (519) 853-8336
B: (519) 212-7442
E: centre@universe.com

Engineer / Designer
Gunnell Engineering Ltd.
S: n/a
P: (905) 856-8400
F: (905) 853-8734

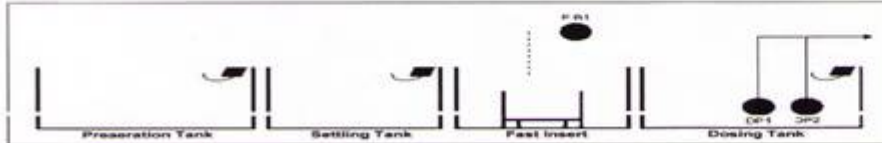
Regulator
NOT ASSIGNED
S: n/a
P: n/a
F: n/a

Dealer
Pinnacle-Cambridge
S: (519) 212-7442
P: (519) 212-7442
F: (519) 653-8336

Installation Address
790 Industrial Rd
Cambridge, Ontario
N3H 4W1

Mailing Address
Ontario

Other Information
Installation Date: Jan 21, 2006
Commission Date: n/a
Activation Date: Jan 21, 2006
Maintenance Agreement: Yes

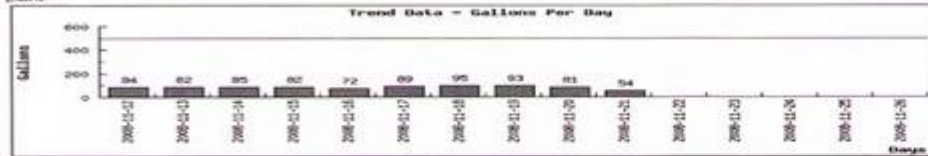


Plant Configuration
MicroFAST® 0.50
PA S1 n/a
PA S2 n/a
P1 n/a
P2 n/a
PB1 Constant Run
PB2 n/a
PB3 n/a
PB4 n/a
DP1 On Demand Simplex
DP2 On Demand Simplex

Pump Trend Data

For this plant, trend data is calculated based on the number of pump events per day. Click on a specific date or bar data to view a pop-up window with the data values for that day. Are dates and times are shown in the time zone of the plant.

From 2006-11-12 To 2006-11-26 Units
Gallons



Rated Maximum Daily Flow 500 Gallons / Day

Total Flow for this Period 820 Gallons

[View Detail](#)

Event Export

This tool allows a CSV file to be created in Excel of the events that occurred, the time and the amount used. Some events will also have the date, hour, minute and the run time. These are the events that occurred that cause the control panel to call in. The events and range from 00 00 00 to the next date to 23 59 59 on the next date.

Start Date End Date

Reminders

No reminders for this plant.

Recent Log Entries

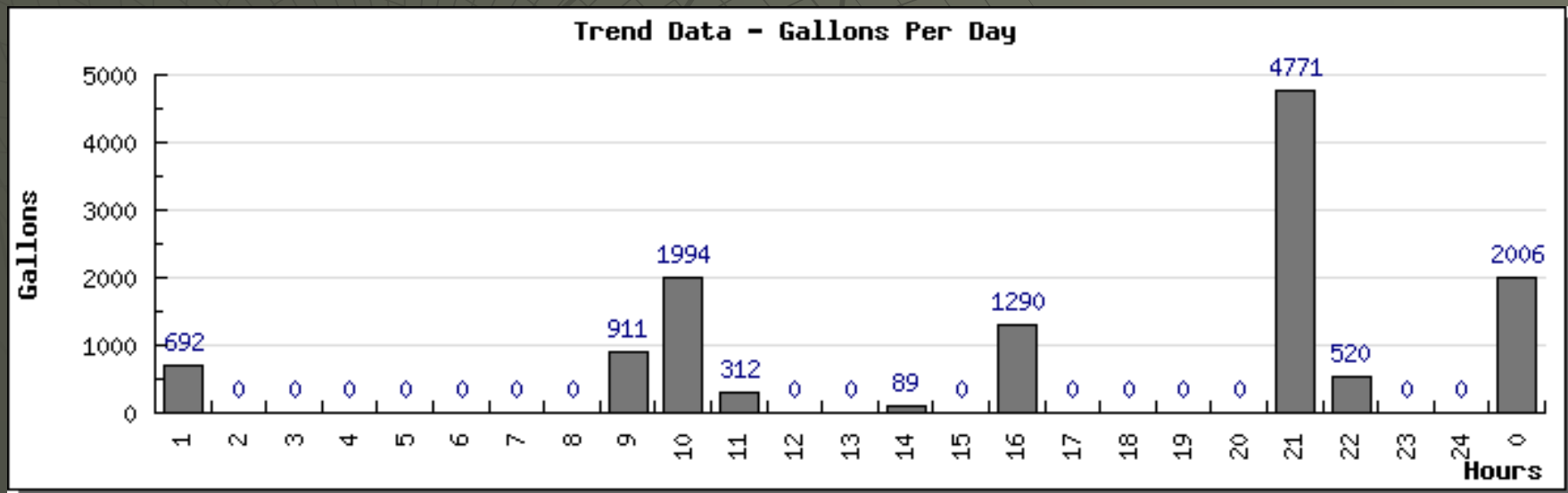
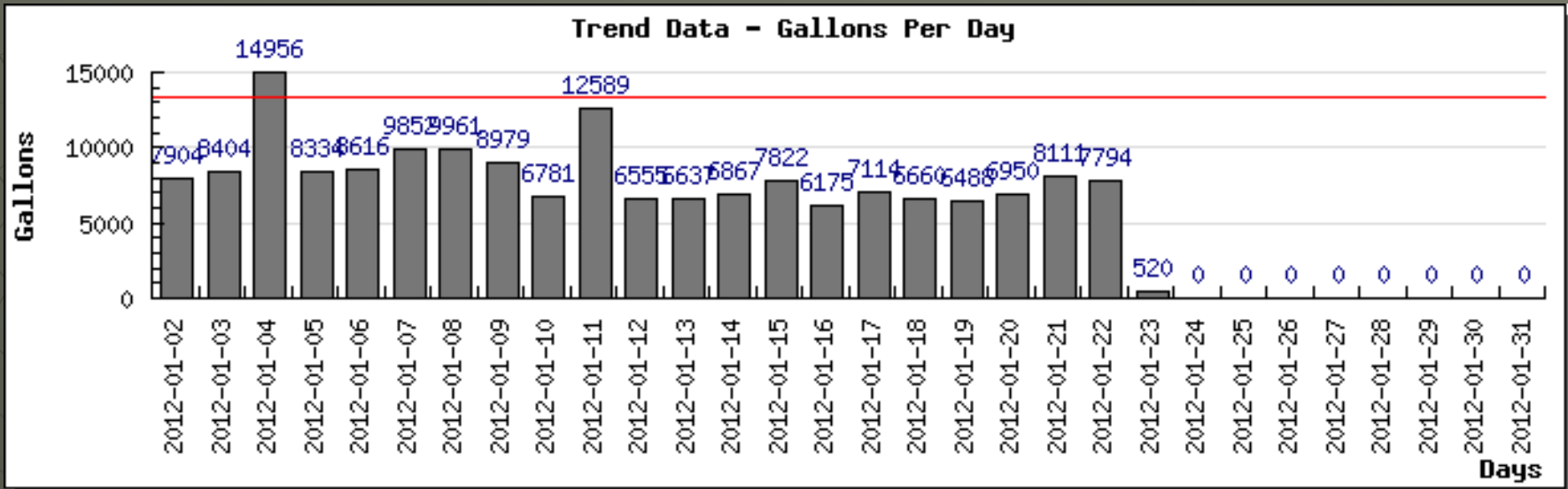
VIEW ALL LOG ENTRIES | Show Only: ALL Current Time at Plant: 2006-11-26 16:16:12 Note: All dates and times are showing in the time zone of the plant.

Displaying the 10 most recent log entries.

Date & Time	Entered By	Log Type	Reminder / Alarm	Note
Nov 24, 2006 14:00	Muni C Palty Municipality #1 P: n/a	Note	n/a	Test
Nov 24, 2006 08:27	Jim Kane Pinnacle-Cambridge P: (519) 212-7442	Plant - Configuration	n/a	The plant (id:225) configuration was changed by user (id:47) on 2006-11-24 08:27:15. The following is a list of changes: Commission Date: changed from 1999-11-30 00:00:00 to unset. Municipality: changed from id not set to id:274.
Nov 21, 2006 16:36	John Martin	Alarm -	2006-11-21 16:30 -	Successful: Alarm (id:204) was cleared by user (id:35). All notifications have also been deleted.

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What it Looks Like

Nov 21, 2008 16:36	Pinnacle B.C. P: (604) 514-7555 John Martin Pinnacle B.C. P: (604) 514-7555	Cleared	High Level	Resolution: rtsbsbsvs
Nov 21, 2008 16:36	John Martin Pinnacle B.C. P: (604) 514-7555	Alarm - Timeline	2008-11-21 16:30 - High Level	Successful: Alarm (id:204) timeline was entered by user (id:35). Timeline Date: 1970-01-01 16:59:59 Timeline Description: rtygsgsrtygs
Nov 21, 2008 16:32	John Martin Pinnacle B.C. P: (604) 514-7555	Alarm - Acknowledged	2008-11-21 16:30 - High Level	Acknowledged: Alarm (id:204) has been acknowledge by user (id:35) and the 1 notifications have been deleted.
Nov 21, 2008 16:31	C: n/a	Notification - Phone	2008-11-21 16:30 - High Level	Phone Call: Completed for alarm (id:204) Notification (id:849). The message was listened to and confirmed.
Nov 21, 2008 16:31	C: n/a	Notification - Email	2008-11-21 16:30 - High Level	Sent: : Critical Alarm (id:849) email sent to Pinnacle-Cambridge [john.martin@peti.ca].
Nov 21, 2008 16:31	C: n/a	Notification - Email	-	Created: : Critical Alarm (id:849) phone call made to Pinnacle-Cambridge [15192127442].
Nov 21, 2008 16:31	C: n/a	Alarm - Creation	n/a	Successful: A new High Level Alarm (id:204) was created for plant (id:225).
Nov 21, 2008 14:47	Jim Kane Pinnacle-Cambridge P: (519) 212-7442	Alarm - Cleared	2008-11-21 13:17 - High Level	Successful: Alarm (id:203) was cleared by user (id:47). All notifications have also been deleted. Resolution: test

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SEPTIC TANK BASED SYSTEM

Date & Time	Entered By	Log Type	Reminder / Alarm	Note
Dec 15, 2011 11:19	Jeff Hay Wastewater Systems Maintenance of Canada P: (604) 514-7576	Inspection/Service Completed	n/a	Yearly service due in 6 more months
Dec 14, 2011 23:00	C: n/a	Notification - Email	This system requires an Inspec...	Sent: Reminder (id:3151) email sent to Wastewater Systems Maintenance of Canada [jeff.hay@wsmcanada.ca].
Jul 08, 2011 14:16	Jeff Hay Wastewater Systems Maintenance of Canada P: (604) 514-7576	Inspection/Service Completed	n/a	Annual septic service completed File: Sewer System Report 2608 180 st.xls
Jul 08, 2011 14:16	Jeff Hay Wastewater Systems Maintenance of Canada P: (604) 514-7576	Note	n/a	Annual septic service blue house File: Sewer System Report 2616 180 st.xls
Jul 08, 2011 14:15	Jeff Hay Wastewater Systems Maintenance of Canada P: (604) 514-7576	Plant - Configuration	n/a	The plant (id:2221) configuration was changed by user (id:141) on 2011-07-08 14:15:22. The following is a list of changes: Customer: Name: changed from 'Adam & Chris Developments (Ber...' to 'Adam & Chris Developments (Ber...'. '.

Central Registry for Onsite Wastewater Treatment Systems

BENEFITS

In combination with education and registration, a central registry for monitoring and tracking maintenance of onsite wastewater system demonstrate to Regulators and Local Governments that onsite wastewater systems are a long term sustainable infrastructure that protect public health, the environment and the consumers property value and therefore can be used for land use planning and development that in turn saves State and local governments human and fiscal resources.

To assist in setting up an educational program contact www.nowra.org or email info@nowra.org

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Thank You for Your Consideration

Questions ?