

Final Surveys

EPA 319 Grant:

Advanced Onsite Sewage Systems in Florida



Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March 15, 2010

«Name» «Suffix»
«Title»
Environmental Health
«County» County Health Department
«Add1»
«CityZip»

Dear «Name»:

The Florida State University (FSU) Survey Research Lab is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct a survey of County Health Departments. The purpose of the survey is to learn about the perceptions and practices of local regulators regarding the management of advanced onsite sewage treatment and disposal units (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters.

The FSU Survey Research Lab will also be gathering information on advanced systems from system owners/users, system manufacturers, installers, maintenance entities, and engineers. The results of these surveys will provide the Bureau with critical information to assess and improve wastewater management in the state.

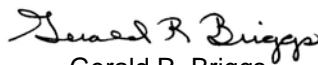
The information you provide is valuable and will assist the Florida Department of Health in planning and administering its onsite sewage programs. Please complete the enclosed form and return it to the FSU Survey Research Lab in the postage paid business reply envelope provided for your convenience.

The Florida Department of Health's Bureau of Onsite Sewage Programs develops and implements statewide rules for permitting the installation, maintenance, and repair of OSTDS within the state, including advanced systems. The Bureau also manages a state funded research program that applies for and receives grants to conduct research on OSTDS in Florida. This project is funded by a grant from the United States Environmental Protection Agency.

Should you have any questions, please feel free to call Ms. Elke Ursin at (850) 245-4070 or contact her by e-mail at Elke_Ursin@doh.state.fl.us.

Thank you for your assistance.

Sincerely,


Gerald R. Briggs
Bureau Chief

NOTE: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and the media upon request. Therefore your responses to this survey may be subject to public disclosure.
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Division of Environmental Health, Bureau of Onsite Sewage Programs
4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Regulators

The Florida Department of Health, Division of Environmental Health, Bureau of Onsite Sewage Programs is conducting a study to measure the practices and perceptions of regulators about the management of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. Your participation in this study will help us identify the strengths of current practices and experiences as well as areas where improvement may be needed. The FSU Survey Research Laboratory is collecting the information for the Bureau.

We appreciate your assistance. Your opinion is valuable and will assist the Florida Department of Health in planning and administering their onsite sewage programs.

The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

NUMBER OF SYSTEMS

1. How many of the following systems are in your county?

- Aerobic Treatment Units (ATU) _____
- Performance-Based Treatment Systems (PBTS) _____
- Sand or Gravel Filters _____
- Innovative Systems _____

INSPECTION PERSONNEL

2. How many FTEs are assigned to conduct ATU/PBTS inspections by your county health department?

Number of FTEs _____

3. Please indicate the number of people in your county health department with the following years of experience inspecting advanced systems:

Experience	Number of People
Less than 1 year	_____
1 to 2 years	_____
3 to 5 years	_____
Over 5 years	_____

4. How would you describe turnover of personnel who conduct inspections on advanced systems in your county health department?

- Not a problem
- Somewhat a problem
- A Problem
- A Serious Problem
- A Very Serious Problem

Please describe what, in your opinion, are the major contributors to turnover.

CONTRACTORS AND MAINTENANCE ENTITIES

5. How many CONTRACTORS INSTALL advanced systems in your county?

- a. Number of Contractors _____
- b. Is this number adequate to meet your county's need?
 Yes No

6. How many LICENSED MAINTENANCE ENTITIES provide maintenance services for advanced systems in your county?

- a. Number of Licensed Maintenance Entities _____
- b. Is this number adequate to meet your county's need?
 Yes No

INFORMATION MANAGEMENT AND RECORDKEEPING

7. Please indicate which of the following methods your county health department uses to ENTER AND MAINTAIN INFORMATION (such as design flow, wastewater type, tank sizes, manufacturer, model) for each type of advanced system. [Please ✓ All That Apply.]

	ATUs	PBTS
EH Database construction permit records	<input type="checkbox"/>	<input type="checkbox"/>
EH Database operating permit records	<input type="checkbox"/>	<input type="checkbox"/>
Carmody database	<input type="checkbox"/>	<input type="checkbox"/>
Spreadsheets/Tables	<input type="checkbox"/>	<input type="checkbox"/>
Paper files	<input type="checkbox"/>	<input type="checkbox"/>
Other electronic database(s)	<input type="checkbox"/>	<input type="checkbox"/>

8. How does your county health department keep track of THE MONITORING REQUIREMENTS for different types of ATUs and PBTS? [Please ✓ All That Apply.]

Monitoring Requirement Examples

ATUs -- >1500 gpd, residential/commercial.

PBTS -- setback and authorized flow allowance, secondary, advanced secondary, Florida Keys.

- | | |
|---|---|
| <input type="checkbox"/> EH Construction database | <input type="checkbox"/> Look at paper files |
| <input type="checkbox"/> EH Facilities database | <input type="checkbox"/> Other [Please Specify.] _____ |
| <input type="checkbox"/> Carmody database | |
| <input type="checkbox"/> Spreadsheet/table | <input type="checkbox"/> Monitoring not required |
| <input type="checkbox"/> Electronic database | <input type="checkbox"/> County health department does not keep track |

9. How does your county health department keep track of the MONITORING AND INSPECTION RESULTS for ATUs and PBTS?

- | | |
|--|---|
| <input type="checkbox"/> EH database Operating permits | <input type="checkbox"/> Other [Please Specify.] _____ |
| <input type="checkbox"/> Carmody database | |
| <input type="checkbox"/> Spreadsheet/table | |
| <input type="checkbox"/> Electronic data base | <input type="checkbox"/> Monitoring not required |
| <input type="checkbox"/> Look at paper files | <input type="checkbox"/> County health department does not keep track |

10. How could your county health department RECORDKEEPING PROCESS for advanced systems be improved and made more efficient?

MONITORING AND SAMPLING

11. How would you describe the extent to which your county uses sampling to monitor ATU and PBTS compliance?

- Limited sampling** *[Please indicate all the reasons that apply.]*
 - Sampling not required
 - No access to system
 - Limited staff
 - Limited resources (money)
 - Visual inspection is sufficient to ensure compliance
 - Other *[Please Specify.]* _____

- Sample the systems that look bad when conducting annual inspection or following-up on a complaint.**

- Sample for special projects.**

- Sample a percentage of the systems in the county regularly at least once a year with the inspection.** *[Please indicate the percentage of the systems you sample.]*
_____ % of advanced systems sampled

- Sample all systems.**

- Other** *[Please Specify.]* _____

12. a. **Has your county health department developed a checklist or form to use when conducting inspections of advanced systems?**

- Yes** Please attach a copy of the inspection form you use.
- No**

b. **What activities are typically included during an inspection?**

[Please ✓ All That Apply.]

- Do inspection at the same time a maintenance entity is doing a maintenance visit
- Open tanks to observe inside of system
- Leave surface undisturbed
- Open observation port
- Trigger alarm
- Trigger pumps
- Observe that power is on
- Check that air supply is running
- Observe if site conditions have changed
- Observe smell from treatment system
- Observe sounds from treatment system
- Record water meter reading
- Record presence, number, or duration of alarms
- Observe ponding depth in drainfield
- Observe wetness in drainfield area
- Observe and record general appearance of treatment system functioning
- Check presence and supply of chlorination tablets if system includes them
- Other: *[Please describe.]* _____

PERMITTING

13. **How common is it to find SUBSTANTIAL CHANGES TO THE PERMITTED DESIGN during construction inspections?**

- Rarely
- Sometimes
- Frequently
- Most of the Time

14. When applications come in who evaluates them? *[Please ✓ All That Apply.]*

Applications for ...	Evaluates Applications				Other <i>[Please Specify.]</i>
	County Health Department Engineer	County Health Department Staff	Bureau Engineer		
ATUs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
PBTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Innovative Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

15. Knowing that a limited number of INNOVATIVE SYSTEMS APPLICATIONS are allowed to be installed, where do you check to find out how many permits for a given system are already filed? *[Please ✓ All That Apply.]*

- | | |
|---|---|
| <input type="checkbox"/> County Health Department files | <input type="checkbox"/> State Health Office Mediator |
| <input type="checkbox"/> Applicant | <input type="checkbox"/> Bureau Engineer |
| <input type="checkbox"/> Contractor | <input type="checkbox"/> Other <i>[Please Specify.]</i> _____ |

16. Has your county passed any ordinances that require standards for advanced systems that are MORE STRINGENT than those required by the State?

Yes Please describe.

No

COMPLIANCE ENFORCEMENT AND CORRECTIVE ACTION

17. Please indicate the number of advanced systems in your county that required COMPLIANCE ENFORCEMENT action in the past year.

a. Number of advanced systems requiring enforcement action. _____

b. What percentage of these systems required multiple enforcement or corrective actions to achieve compliance? _____%

18. COMPLIANCE ENFORCEMENT actions required in the past year were most often due to:

- Paperwork issues such as failure to pay fees on time or failure to provide updated paperwork when requested
- Technical / sewage issues such as the system not working correctly
- Other *[Please Specify.]* _____

19. In general, how often is each of the following successful in ACHIEVING COMPLIANCE for systems that require corrective action?

<u>Achieve Compliance</u>	<u>RARELY</u>	<u>SOME OF THE TIME</u>	<u>MOST OF THE TIME</u>	<u>ALL OF THE TIME</u>	<u>DON'T KNOW</u>
a. Notice to correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Citation/ fine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Administrative complaint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Revocation of permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Re-engineering of system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other <i>[Please Specify.]</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MAINTENANCE ENTITY PERFORMANCE

20. Please indicate the percentage of reports submitted by maintenance entities in the following format:

<u>Maintenance Entity Reports</u>	<u>PERCENT SUBMITTED BY FORMAT</u>					
	<u>5% or Less</u>	<u>10%</u>	<u>25%</u>	<u>50%</u>	<u>75%</u>	<u>100%</u>
Paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carmody Database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other <i>[Please Specify.]</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. How would you rate the OVERALL QUALITY of maintenance entity reports submitted to your county?

- EXCELLENT
 GOOD
 FAIR
 POOR

22. When COMPARING INSPECTION REPORTS about the same system by the maintenance entity and the county health department, would you say:

- Both usually agree
- Maintenance entity reports usually indicate better performance
- County inspections usually indicate better performance
- Depends on maintenance entity

23. How does your county obtain the results of effluent sampling performed by maintenance entities? [Please ✓ All That Apply.]

- County receives copy from lab
- Maintenance entity reports results to County Health Department
- County Health Department does not get reports; maintenance entities keep results
- Effluent sampling by maintenance entity does not take place
- Other [Please Specify.] _____

24. In customer COMPLAINTS OR COMMENTS related to their maintenance entity, how often do customers express concern about:

Customer Complaints	RARELY	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME
Cost of maintenance contract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being able to choose between several maintenance entities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other [Please Specify]. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TRAINING AND EDUCATION NEEDS

25. Please tell us about any training needs for county staff, maintenance entities, or consumers that you would like to be made available regarding advanced systems.

a. County Health Department Staff Education / Training Needs:

b. Maintenance Entity Education / Training Needs:

c. Consumer Education / Training Needs:

d. Installer/Engineer Education / Training Needs:

e. Manufacturer Education / Training Needs:

GENERAL ASSESSMENT

26. How would you rate the **OVERALL TREATMENT PERFORMANCE** of the systems in your county?

Type of System	EXCELLENT	GOOD	FAIR	POOR	NO BASIS TO JUDGE
a. ATU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. PBTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. Please tell us about what aspects of the advanced system program in Florida are currently working well as it relates to construction permitting, design, installation, inspection, maintenance, and operating permitting:

28. Please tell us about any changes or improvements you would like to see in regards to the following:

a. ATU regulation, permitting, and management:

b. PBTS regulation, permitting, and management:

c. Maintenance entity regulation, permitting, and management:

d. Innovative System regulation, permitting, and management:

d. Sand / Gravel Filter regulation, permitting, and management:

BACKGROUND INFORMATION

Please give us information for contacting you if we have a question.

County Health Department :
Address:
Phone:
Fax:
E-mail:
Contact Name:
Position:

Thank you for taking the time to help us with this study.

Please return the survey in the business reply envelope or fax to:

<p style="text-align: center;">Fax FSU Survey Research Laboratory 850.644.0792</p> <p style="text-align: center;">Use Business Reply Envelope or Mail to: FSU Survey Research Laboratory Florida State University MC 2221 Tallahassee FL 32306-2221</p>

Sample Owner Plan-SRL Final Feb24

Sample Name	Number
1 ATU Commercial	549
2 ATU Residence	1280
3 ATU Unknown	550
4 Innovative Commercial	9
5 Innovative Residential	175
6 Innovative Unknown	0
7 PBTS Commercial	31
8 PBTS Residential	1045
9 PBTS Unknown	156
TOTAL	3795

	Commercial	Residential	Unknown	Total
				3795
ATU	549	1280	550	2379
Innovative	9	175	0	184
PBTS	31	1045	156	1232

Sample Number

	Commercial	Residential	Unknown
ATU	1	2	3
Innovative	4	5	6
PBTS	7	8	9



Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March 2010

«FinalName» «occupant»
«CompleteStreetAddress»
«City», Florida «Zip»

Dear Sir/Madam:

You have received this survey because your address is associated with permit files of an onsite sewage treatment and disposal system (OSTDS), commonly referred to as a septic tank) that includes advanced treatment, such as an aerobic treatment unit or a performance based treatment system. We would like your views and experiences with your advanced treatment system. The results of this survey will provide the Florida Department of Health with critical information to assess and improve wastewater management in Florida.

The Florida State University Survey Research Laboratory is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct this survey. The Bureau of Onsite Sewage Programs develops and implements statewide rules for permitting the installation, maintenance, and repair of OSTDS within Florida, including advanced systems. We will also be gathering information on advanced onsite sewage treatment and disposal systems (OSTDS) from system installers, system manufacturers, maintenance entities, engineers, and County Health Departments. More information about the Bureau and the results of these surveys will be made available on our website:

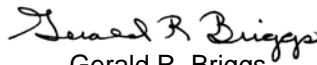
<http://myfloridaeh.com/ostds/research>

Your participation is voluntary, but important and will assist the Department in planning and administering its onsite sewage programs. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience. The survey should take about 8 minutes to complete.

Should you have any questions, please feel free to call Ms. Elke Ursin at (850) 245-4070 or contact her by e-mail at Elke_Ursin@doh.state.fl.us.

Thank you for your assistance.

Sincerely,


Gerald R. Briggs
Bureau Chief

NOTE: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and the media upon request. Therefore your responses to this survey may be subject to public disclosure.
«track»



Division of Environmental Health, Bureau of Onsite Sewage Programs
4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Owners and Users

The Florida Department of Health, Division of Environmental Health, Bureau of Onsite Sewage Programs is conducting a study to measure the practices and perceptions of owners and users about the management of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. Your participation in this study will help us identify the strengths of current practices and experiences as well as areas where improvement may be needed. The FSU Survey Research Laboratory is collecting the information for the Bureau.

Your participation is voluntary, but important and will assist the Florida Department of Health in improving wastewater management. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience. Thank you for your participation.

The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

CHARACTERISTICS OF YOUR ADVANCED ONSITE SEWAGE SYSTEM

1. You have been identified as having an advanced Onsite Sewage Treatment and Disposal System. What type of ADVANCED SYSTEM do you have?

- Aerobic Treatment Unit
- Performance-Based Treatment system
- Sand or gravel filter
- Innovative System *[Please Specify.]* _____
- Other *[Please Specify.]* _____
- Don't Know

- No, my home/business does not have a septic system → Please return the survey in the envelope provided.
- My home/business does not have an ADVANCED system →
[standard septic tank, drainfield system]

2. Please provide the name of your system's manufacturer.

- Manufacturer of system _____
- Don't know the name of the manufacturer

3. When was your system installed?

- Within the past year
- 2 to 3 years ago
- 4 to 5 years ago
- 6 to 10 years ago
- More than 10 years ago
- Don't Know

OPERATION AND MAINTENANCE

4. How many times have you experienced problems with your sewage system over the PAST YEAR?

- Never Several Times
 Once or Twice Just about weekly

5. Within the LAST 5 YEARS, have you had any of the following problems?

[Please ✓ all that apply.]

- Sewage on ground Tank damaged
 Plumbing backup Parts broken/ system stopped working
 Drainfield damaged D-box/ header damaged
 Other *[Please Specify.]* _____
 No problems in the last 5 years

6. If you experienced problems, what was the CAUSE OF PROBLEMS?

[Please ✓ all that apply.]

- System damage System malfunction
 Water table too high Too much water (hydraulic overload)
 Weather/ flooding Inadequate drainage (area too wet)
 Roots Soils
 Other *[Please Specify.]* _____
 No problems in the last 5 years

7. Who do you USUALLY rely on to fix problems with your system?

- Self Septic tank contractor/ plumber
 Maintenance entity County Health Department
 Other *[Please Specify.]* _____

8. How satisfied are you with the way problems with your system are handled?

- Very Satisfied Satisfied Dissatisfied Very Dissatisfied
 Other *[Please Specify.]* _____

ASSESSMENT OF YOUR ADVANCED SYSTEM

9. How would you describe your overall satisfaction with your advanced onsite sewage system (septic system)?

- Very Satisfied Satisfied Dissatisfied Very Dissatisfied

10. In your opinion, what is the GREATEST ADVANTAGE of having one of these systems?

[Please ✓ One.]

- Low cost Not being hooked up to sewer system
 Cleaner wastewater Increased options for building on lot
 System will last longer *[possible to build what we want to build on lot]*
 Other *[Please Specify.]* _____

11. If cost was equal, would you prefer to:

- Continue to use an advanced onsite system
- Hookup to a municipal/ county sewer system
- Use simpler conventional septic system and pay savings into a water quality improvement trust fund

SYSTEM INSPECTION AND MONITORING

12. Do you periodically inspect your own system?

- Yes, at least every few months
- Yes, about once or twice a year
- No, I don't inspect it at all

13. How often is your onsite septic system inspected by your MAINTENANCE ENTITY?

- Never
- Only when there is a problem
- Less than 2 times a year
- I don't have a maintenance entity
- Twice a year
- 3 or more times a year
- Don't Know

14. Are you informed of the RESULTS OF INSPECTIONS conducted by:

- | | Yes | No |
|--|--------------------------|--------------------------|
| County Health Department | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintenance entity | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> I don't have a maintenance entity | | |

EDUCATION ABOUT YOUR ADVANCED SYSTEM

15. What way would you prefer to receive INFORMATION FROM YOUR COUNTY HEALTH DEPARTMENT about your advanced onsite system? [Please ✓ all that apply.]

- Mailed brochures
- Utility bill inserts
- E-mails
- Newspapers
- Other [Please Specify.] _____
- TV/ Radio
- Information posted on department website
- Public meetings/ workshops
- Presentations to civic groups (e.g., Rotary Club)

16. Please tell us about topics related to advanced onsite systems that you would like to learn more about.

OPERATING PERMITS AND MAINTENANCE FOR ADVANCED ONSITE SEWAGE SYSTEMS

17. How difficult was it to find a maintenance entity for your system?

- Very difficult to find
- Somewhat difficult to find
- Not difficult at all

- I don't have a maintenance entity

18. What do you estimate is the COST of your:

- a. Operating permits and maintenance contract (agreement) for one year \$ _____
- b. Repairs and other items not covered by your maintenance contract last year \$ _____

19. How would you rate your satisfaction with the services provided by your maintenance entity?

- Very Satisfied Satisfied Dissatisfied Very Dissatisfied

- No basis to judge
- Other [Please Specify.] _____

20. When your current agreement comes up for renewal will you:

[Please ✓ all that apply.]

- Renew maintenance agreement with same entity
- Switch to a different maintenance entity because of price
- Switch to a different maintenance entity because of low level of service
- I would like to switch but there is no alternative
- Other [Please Specify.] _____

21. If you had your choice, who would you PREFER TO DEAL WITH the permitting and maintenance of your advanced onsite system?

[Please ✓ One.]

- Utility-type entity owns the system and charges monthly cost that includes all maintenance, repairs, replacement, operating permit, etc.
- Utility-type entity charges monthly cost that includes all maintenance, repairs, replacement, operating permit, etc. You remain the owner of the system.
- Maintenance entity that charges monthly cost for standard maintenance and operating permits. Repairs are extra.
- Maintenance entity that charges for maintenance and operating permits in one lump sum when they are due. Repairs are extra.
- Do-it-yourself, with help by contractors as needed.
- Other [Please Specify.] _____

GENERAL COMMENTS

22. Please tell us about any changes or improvements you would like to see related to the regulation, permitting and management of advanced onsite sewage treatment and disposal systems in the State of Florida:

BACKGROUND INFORMATION

In what COUNTY is your system located?

How many months of the year is this SYSTEM IN USE?

_____ months a year

Do you OWN OR RENT the property?

- Own
 Rent

Your SYSTEM SERVES a.....

- Single family house
 Duplex/ apartment/ condominium
 Modular/ Mobile home
 Business

Are you a FULL TIME or SEASONAL resident?

- Full Time
 Seasonal

Other *[Please Specify.]:*

HOW MANY people use your system?

_____ people

In what year were you BORN?

You are:

- Female
 Male

What is the highest grade or year of school you have COMPLETED?

- 8 years or less
 9 to 11 years
 High school
 Business or technical school
 Community college
 Completed college
 Graduate or professional school

Which of the following best describes your TOTAL HOUSEHOLD INCOME in 2009?

- Under \$15,000
 \$ 15,000 to \$25,000
 \$25,001 to \$45,000
 \$45,001 to \$65,000
 \$65,001 to \$85,000
 \$85,001 to \$100,000
 Over \$100,000

Thank you for your participation.

**Please Return This Survey in the Business Reply Envelope
or Mail to:**

FSU Survey Research Laboratory
Florida State University
MC 2221
Tallahassee FL 32306-2221



Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March, 2010

Letter to Engineers

The Florida State University (FSU) Survey Research Lab is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct a survey of engineers who design advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. The purpose of the survey is to learn about the perceptions and practices of system engineers regarding the management of advanced OSTDS.

The FSU Survey Research Lab will also be gathering information on advanced OSTDS from system owners/users, system manufacturers, system installers, maintenance entities, and County Health Departments. The results of these surveys will provide the Bureau with critical information to assess and improve wastewater management in the state.

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Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Gerald R. Briggs".

Gerald R. Briggs
Bureau Chief

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4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Engineers

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The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

SYSTEMS DESIGNED

1. **Does your firm/company design advanced treatment systems such as aerobic treatment units (ATUs), performance-based treatment systems (PBTS), and/or innovative systems?**

NO Please tell us why you do not work on advanced systems and skip to Question 10 in the Training and Education Needs Section on page 5.

YES *[Please answer the following.]*

a. **Please list the TYPES AND MANUFACTURERS of the advanced treatment systems normally used in your designs.**

b. **What are the reasons you design the systems listed above?**

c. How many of the following systems did your company DESIGN FOR USE IN FLORIDA during the last year?

Type of System	Number of Systems
Aerobic Treatment Unit (ATU) <i>[Aerobic Treatment Unit only, i.e. not part of a PBTS]</i>	_____ systems
Performance-Based Treatment System (PBTS), <i>[Not counting innovative systems]</i>	_____ systems
Innovative Systems	_____ systems
Sand or Gravel Filters	_____ systems

d. What percentage of your company's annual revenue comes from DESIGNING ADVANCED SYSTEMS FOR USE IN FLORIDA?

_____ % of annual company revenue

PERMITTING AND OPERATION

2. Do you normally handle construction and operating permitting with the County Health Department for the advanced systems that you design?

Yes *[Please answer the following]*

HOW MANY DAYS does it typically take from filing a construction permit application to construction permit issuance?

ATU only	_____	Innovative Systems	_____
PBTS	_____	Sand or Gravel Filters	_____

No Please tell us who handles permits for the advanced systems you design.

3. How common is it to find SUBSTANTIAL CHANGES TO THE PERMITTED DESIGN during construction inspections?

- Rarely
- Sometimes
- Frequently
- Most of the Time

4. How often does your firm/company have to re-engineer one of its designs for an advanced system in Florida because the system had problems that occurred after the installation was complete?

- Rarely
- Some of the time
- Most of the time
- All of the time

5. How often is each of the following a reason one of your advanced system designs needs to be re-engineered?

Reason for Re-engineering	RARELY	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	DON'T KNOW
a. Homeowner misuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Malfunctioning treatment system parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Engineer design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Dosing Pump Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Drainfield Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Other <i>[Please Specify.]</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How would you rate the OVERALL TREATMENT PERFORMANCE of the systems you have designed:

Type of Advanced System	EXCELLENT	GOOD	FAIR	POOR	NO BASIS TO JUDGE
a. ATU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. PBTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MAINTENANCE, MONITORING, AND SAMPLING

7. Do you require sampling for the advanced systems you design?

- YES** Please tell us about the reasons sampling is required, and what sampling frequency you recommend.

- NO** Please tell us about the reasons sampling is not required.

8. In the operation and maintenance manual for a performance-based treatment system or similar system, which tasks do you usually specify for the maintenance entity to perform? [Please ✓ all that apply.]

Forms and Checklists

- Work through a manufacturer's or distributor's check list
- Work through the engineer's check list if engineered-designed
- Work through the County Health Department's check list
- Work through own check list

System Access

- Open covers to observe aerobic treatment chamber
- Open covers to observe trash tank/compartment
- Open covers to observe clarifier/dosing tank
- Leave surface undisturbed
- Open observation port

Equipment Checks

- Trigger alarm
- Trigger pumps
- Check that air supply is running

Maintenance Actions

- Inspect/clean effluent filter
- Inspect/clean air filter
- Inspect/clean air diffusers
- Pump tank(s) every _____ years
- Replace parts
- Other** [Please describe.]

Assessment of Operating Conditions

- Check clarity of water in treatment tank/clarifier
- Check for smell from treatment system
- Check sounds from treatment system
- Measure sludge accumulation
- Check how well solids settle in aerobic treatment chamber
- Record water meter reading
- Record number of dosing events or pump runtime (for dosed systems)
- Record presence, number, or duration of alarms
- Check and record pressure (drip systems)
- Check ponding depth in drainfield
- Check wetness in drainfield area
- Check presence and supply of chlorination tablets if system includes them
- Observe and record general appearance of treatment system functioning

Assessment of Effluent Quality

- Observe clarity of effluent in observation port
- Use test strips to assess effluent concentrations
- Use chemistry kits to assess effluent concentrations
- Take effluent samples for laboratory analysis
- Take groundwater samples

CONTACT WITH OTHER ENTITIES

9. To what extent does your firm/company INTERACT WITH EACH OF THE FOLLOWING ENTITIES CONCERNING THE ADVANCED SYSTEMS YOUR FIRM DESIGNS?

Entity	RARELY INTERACT	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	OTHER [PLEASE SPECIFY.]
a. Maintenance Entities for systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
b. Owners of systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
c. County Health Department Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
d. Manufacturers of system components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
e. Installers of systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____

TRAINING AND EDUCATION NEEDS

10. Please tell us about educational/training opportunities related to advanced systems that you would like to be made available to individuals in your profession.

GENERAL ASSESSMENT

11. Please tell us about what aspects of the advanced system program in Florida are currently working well as it relates to construction permitting, design, installation, inspection, maintenance, and operating permitting:

12. Please tell us about any changes or improvements you would like to see to the following:

- a. ATU regulation, permitting, and management:

- b. PBTS regulation, permitting, and management:

- c. Maintenance entity regulation, permitting, and management:

- d. Innovative System and/or Sand or Gravel Filter regulation, permitting, and management:

BACKGROUND INFORMATION

Please give us information for contacting you if we have a question.

Name of Your Firm :
Address:
Phone:
Fax:
E-mail:
Contact Name:
Position:

Thank you for taking the time to help us with this study.

Please return this survey in the business reply envelope or fax to:

<p style="text-align: center;">Fax FSU Survey Research Laboratory 850.644.0792</p> <p style="text-align: center;">Use Business Reply Envelope or Mail to: FSU Survey Research Laboratory Florida State University MC 2221 Tallahassee FL 32306-2221</p>



Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March, 2010

Letter to Installers

The Florida State University (FSU) Survey Research Lab is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct a survey of contractors who install advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. The purpose of the survey is to learn about the perceptions and practices of system installers regarding the management of advanced OSTDS.

The FSU Survey Research Lab will also be gathering information on advanced OSTDS from system owners/users, system manufacturers, maintenance entities, system engineers, and County Health Departments. The results of these surveys will provide the Bureau with critical information to assess and improve wastewater management in the state.

Your participation is voluntary, but important and will assist the Department in planning and administering its onsite sewage programs. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience.

The Florida Department of Health's Bureau of Onsite Sewage Programs develops and implements statewide rules for permitting the installation, maintenance, and repair of OSTDS within the state, including advanced systems. The Bureau also manages a state funded research program that applies for and receives grants to conduct research on OSTDS in Florida. This project is funded by a grant from the United States Environmental Protection Agency.

Should you have any questions, please feel free to call Ms. Elke Ursin at (850) 245-4070 or contact her by e-mail at Elke_Ursin@doh.state.fl.us.

Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Gerald R. Briggs".

Gerald R. Briggs
Bureau Chief

NOTE: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and the media upon request. Therefore your responses to this survey may be subject to public disclosure.



Division of Environmental Health, Bureau of Onsite Sewage Programs
4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Installers

The Florida Department of Health, Division of Environmental Health, Bureau of Onsite Sewage Programs is conducting a study to measure the practices and perceptions of installers about the management of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. Your participation in this study will help us identify the strengths of current practices and experiences as well as areas where improvement may be needed. The FSU Survey Research Laboratory is collecting the information for the Bureau.

Your participation is voluntary, but important and will assist the Florida Department of Health in improving wastewater management. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience. Thank you for your participation.

The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

SYSTEMS INSTALLED

1. Does your company install advanced treatment systems, such as aerobic treatment units (ATUs), performance-based treatment systems (PBTS), sand or gravel filters, and/or innovative systems?

YES [Please answer the following.]

a. Please list the TYPES AND MANUFACTURERS of the advanced treatment systems your company is certified to install.

b. What are the reasons you install the systems listed above?

c. How many of the following systems did your company INSTALL IN FLORIDA during the last year?

Aerobic Treatment Unit (ATU only, i.e. not part of a PBTS)	_____ systems
Performance-Based Treatment System (PBTS), not counting innovative systems	_____ systems
Innovative Systems	_____ systems
Sand or Gravel Filters	_____ systems

d. What percentage of your company's annual revenue comes from INSTALLING ADVANCED SYSTEMS IN FLORIDA?

_____ % of annual company revenue

NO - Please tell us why you do not install advanced systems.

2. Are you a MAINTENANCE ENTITY?

YES

NO - Please tell us why you are not a maintenance entity.

REPAIR

3. Please estimate the average number of repair calls your company performs per year for a typical system.

ATU only _____

PBTS _____

Innovative Systems _____

Sand or Gravel Filters _____

4. How often are each of the following a REASON FOR FAILURE OR PROBLEMS with the systems you install?

Reason for Failure or Problems	NEVER	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	DON'T KNOW
a. Homeowner misuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Malfunctioning treatment system parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Engineer design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Dosing Pump Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Drainfield Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Power to unit turned off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Other <i>[Please Specify.]</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. How would you rate the OVERALL TREATMENT PERFORMANCE of the systems you install?

Type of System Installed	EXCELLENT	GOOD	FAIR	POOR	NO BASIS TO JUDGE
a. ATU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. PBTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Innovative Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Sand or Gravel Filters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT WITH OTHER ENTITIES

6. To what extent does your firm/company INTERACT WITH EACH OF THE FOLLOWING ENTITIES CONCERNING THE ADVANCED SYSTEMS YOU INSTALL?

Entity	RARELY INTERACT	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	OTHER [PLEASE SPECIFY.]
a. Owners of systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
b. County Health Department Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
c. Manufacturers of system components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
d. Engineers of the systems you install	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
e. Maintenance Entities for systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WE ARE THE MAINTENANCE ENTITY <input type="checkbox"/>

7. What method does your company use to determine CUSTOMER SATISFACTION WITH THE PERFORMANCE of the advanced systems you install? [Please ✓ all that apply.]

- Track customer complaints received
- Leave card for customer comments with service call/inspection
- Questionnaire sent with bill
- Don't keep track
- Other [Please Specify.] _____

8. Do you normally handle construction and operating permitting with the County Health Department for the systems you install?

Yes

How many days does it typically take from filing a construction permit application to construction permit issuance?

ATU only _____ Innovative Systems _____
 PBTS _____ Sand or Gravel Filters _____

No Please tell us who handles permitting for the systems you install?

INFORMATION MANAGEMENT

9. Which system or method do you use for accessing and keeping information on the advanced systems you install?

- | | |
|--|---|
| <input type="checkbox"/> Carmody Database | <input type="checkbox"/> Contact county health department when needed |
| <input type="checkbox"/> Spreadsheets and tables | <input type="checkbox"/> Other <i>[Please Specify.]</i> _____ |
| <input type="checkbox"/> Paper filing system | |

TRAINING AND EDUCATION NEEDS

10. Please tell us about training opportunities related to ATUs and PBTS that you would like to be made available to your company personnel.

GENERAL ASSESSMENT

11. Please tell us about what aspects of the advanced system program in Florida are currently working well as it relates to construction permitting, design, installation, inspection, maintenance, and operating permitting:

12. Please tell us about any changes or improvements you would like to see to the following:

a. ATU regulation, permitting, and management:

b. PBTS regulation, permitting, and management:

c. Innovative System regulation, permitting, and management:

d. Sand or Gravel Filter regulation, permitting, and management:

e. Maintenance entity regulation, permitting, and management:

BACKGROUND INFORMATION

Please give us information for contacting you if we have a question.

Name of Your Business :
Address:
Phone:
Fax:
E-mail:
Contact Name:
Position:

Thank you for taking the time to help us with this study.

Please return this survey in the business reply envelope or fax to:

<p style="text-align: center;">Fax FSU Survey Research Laboratory 850.644.0792 Use Business Reply Envelope or Mail to: FSU Survey Research Laboratory Florida State University MC 2221 Tallahassee FL 32306-2221</p>
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Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March, 2010

Letter to Maintenance Entities

The Florida State University (FSU) Survey Research Lab is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct a survey of contractors who are maintenance entities for advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. The purpose of the survey is to learn about the perceptions and practices of system maintenance entities regarding the management of advanced OSTDS.

The FSU Survey Research Lab will also be gathering information on advanced OSTDS from system owners/users, system manufacturers, system installers, system engineers, and County Health Departments. The results of these surveys will provide the Bureau with critical information to assess and improve wastewater management in the state.

Your participation is voluntary, but important and will assist the Department in planning and administering its onsite sewage programs. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience.

The Florida Department of Health's Bureau of Onsite Sewage Programs develops and implements statewide rules for permitting the installation, maintenance, and repair of OSTDS within the state, including advanced systems. The Bureau also manages a state funded research program that applies for and receives grants to conduct research on OSTDS in Florida. This project is funded by a grant from the United States Environmental Protection Agency.

Should you have any questions, please feel free to call Ms. Elke Ursin at (850) 245-4070 or contact her by e-mail at Elke_Ursin@doh.state.fl.us.

Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Gerald R. Briggs".

Gerald R. Briggs
Bureau Chief

NOTE: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and the media upon request. Therefore your responses to this survey may be subject to public disclosure.



Division of Environmental Health, Bureau of Onsite Sewage Programs
4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Maintenance Entities

The Florida Department of Health, Division of Environmental Health, Bureau of Onsite Sewage Programs is conducting a study to measure the practices and perceptions of maintenance entities about the management of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. Your participation in this study will help us identify the strengths of current practices and experiences as well as areas where improvement may be needed. The FSU Survey Research Laboratory is collecting the information for the Bureau.

Your participation is voluntary, but important and will assist the Florida Department of Health in improving wastewater management. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience. Thank you for your participation.

The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

AMOUNT OF MAINTENANCE WORK

1. How many, and what types, of the following advanced onsite systems do you maintain:

- a. How many **Aerobic Treatment Units** * does your company MAINTAIN in Florida at this time?**
**This question pertains to ATU only systems, i.e. units that are NOT a component of a PBTS*

Aerobic Treatment Unit (ATU) _____ units/systems

Please list the TYPES AND MANUFACTURERS of the ATUs your company maintains in Florida.

- **b. How many **PBTS** * units does your company MAINTAIN in Florida at this time?**
** This question includes ATU's used as part of a PBTS*

Performance-Based Treatment System (PBTS) _____ units/systems

Please list the TYPES AND MANUFACTURERS of the PBTS your company maintains in Florida.

- **c. How many **INNOVATIVE SYSTEM** * units does your company MAINTAIN in Florida at this time?** ** This question includes ATU's used as part of an INNOVATIVE SYSTEM*

Innovative System _____ units/systems

Please list the TYPES AND MANUFACTURERS of the INNOVATIVE SYSTEMS your company maintains in Florida.

MAINTENANCE, MONITORING, AND SAMPLING

9. When you or your staff performs a maintenance inspection, what is usually done?

[Please ✓ all that apply.]

Forms and Checklists

- Work through a manufacturer's or distributor's check list
- Work through the engineer's check list if engineered-designed
- Work through the County Health Department's check list
- Work through own check list

System Access

- Open covers to observe aerobic treatment chamber
- Open covers to observe trash tank/compartments
- Open covers to observe clarifier/dosing tank
- Leave surface undisturbed
- Open observation port

Equipment Checks

- Trigger alarm
- Trigger pumps
- Check that air supply is running

Maintenance Actions

- Inspect/clean effluent filter
- Inspect/clean air filter
- Inspect/clean air diffusers
- Pump tank(s) every _____ years
- Replace parts
- Other** *[Please describe.]*

Assessment of Operating Conditions

- Check clarity of water in treatment tank/clarifier
- Check for smell from treatment system
- Check sounds from treatment system
- Measure sludge accumulation
- Check how well solids settle in aerobic treatment chamber
- Record water meter reading
- Record number of dosing events or pump runtime (for dosed systems)
- Record presence, number, or duration of alarms
- Check and record pressure (drip systems)
- Check ponding depth in drainfield
- Check wetness in drainfield area
- Check presence and supply of chlorination tablets if system includes them
- Observe and record general appearance of treatment system functioning

Assessment of Effluent Quality

- Observe clarity of effluent in observation port
- Use test strips to assess effluent concentrations
- Use chemistry kits to assess effluent concentrations
- Take effluent samples for laboratory analysis
- Take groundwater samples

13. Which system or method do you use for accessing and keeping information on the systems you maintain?

- Carmody Database
 Contact county health department when needed
 Spreadsheets and tables
 Other [Please Specify.] _____
 Paper filing system

If you do not use the Carmody Database system, please indicate why:

- Don't know about this free service
 No access to computers
 No access to the internet
 Data security issues
 Don't want to use more than one record-keeping method
 Other [Please Specify.] _____

PERFORMANCE

14. How would you rate the OVERALL TREATMENT PERFORMANCE of the systems you maintain?

Type of System Maintained	EXCELLENT	GOOD	FAIR	POOR	NO BASIS TO JUDGE
a. ATU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. PBTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Innovative Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT WITH OTHER ENTITIES

15. To what extent do you INTERACT WITH EACH OF THE FOLLOWING ENTITIES CONCERNING THE ADVANCED SYSTEMS YOU MAINTAIN?

Entity	RARELY INTERACT	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	OTHER [PLEASE SPECIFY.]
a. Manufacturers of systems you maintain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
b. Owners of systems you maintain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
c. County Health Department Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
d. Engineers of the systems you maintain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
e. Installers of systems you maintain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WE ARE THE INSTALLER <input type="checkbox"/>

TRAINING AND EDUCATION NEEDS

16. Please tell us about training opportunities related to ATUs and PBTS that you would like to be made available to your company personnel.

GENERAL ASSESSMENT

17. Please tell us about what aspects of the advanced system program in Florida are currently working well as it relates to construction permitting, design, installation, inspection, maintenance, and operating permitting:

18. Please tell us about any changes or improvements you would like to see in regards to the following:

- a. ATU regulation, permitting, and management:

- b. PBTS regulation, permitting, and management:

- c. Innovative System regulation, permitting, and management:

- d. Maintenance entity regulation, permitting, and management:

BACKGROUND INFORMATION

Please give us information for contacting you if we have a question.

Name of Your Business :
Address:
Phone:
Fax:
E-mail:
Contact Name:
Position:

Thank you for taking the time to help us with this study.

Please return this survey in the business reply envelope or fax to:

<p>Fax</p> <p>FSU Survey Research Laboratory 850.644.0792</p> <p>Use Business Reply Envelope or Mail to:</p> <p>FSU Survey Research Laboratory Florida State University MC 2221 Tallahassee FL 32306-2221</p>



Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

March, 2010

Letter to Manufacturers

The Florida State University (FSU) Survey Research Lab is under contract with the Florida Department of Health Bureau of Onsite Sewage Programs to conduct a survey of manufactures of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. The purpose of the survey is to learn about the perceptions and practices of system manufacturers regarding the management of advanced OSTDS.

The FSU Survey Research Lab will also be gathering information on advanced OSTDS from system owners/users, system installers, maintenance entities, engineers, and County Health Departments. The results of these surveys will provide the Bureau with critical information to assess and improve wastewater management in the state.

Your participation is voluntary, but important and will assist the Department in planning and administering its onsite sewage programs. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience.

The Florida Department of Health's Bureau of Onsite Sewage Programs develops and implements statewide rules for permitting the installation, maintenance, and repair of OSTDS within the state, including advanced systems. The Bureau also manages a state funded research program that applies for and receives grants to conduct research on OSTDS in Florida. This project is funded by a grant from the United States Environmental Protection Agency.

Should you have any questions, please feel free to call Ms. Elke Ursin at (850) 245-4070 or contact her by e-mail at Elke_Ursin@doh.state.fl.us.

Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Gerald R. Briggs".

Gerald R. Briggs
Bureau Chief

NOTE: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and the media upon request. Therefore your responses to this survey may be subject to public disclosure.



Division of Environmental Health, Bureau of Onsite Sewage Programs
4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1713



Advanced Onsite Systems in Florida: Survey of Manufacturers

The Florida Department of Health, Division of Environmental Health, Bureau of Onsite Sewage Programs is conducting a study to measure the practices and perceptions of manufacturers about the management of advanced onsite sewage treatment and disposal systems (OSTDS). Advanced treatment systems for the purposes of this study include aerobic treatment units (ATUs), performance-based treatment systems (PBTS), innovative systems, and sand or gravel filters. Your participation in this study will help us identify the strengths of current practices and experiences as well as areas where improvement may be needed. The FSU Survey Research Laboratory is collecting the information for the Bureau.

Your participation is voluntary, but important and will assist the Florida Department of Health in improving wastewater management. If you wish to participate, please complete the enclosed survey and return it in the postage paid business reply envelope provided for your convenience. Thank you for your participation.

The results of this study will be posted on our website: <http://myfloridaeh.com/ostds/research>

MANUFACTURE AND SALE OF ADVANCED UNITS IN FLORIDA

1. **Does your company manufacture advanced treatment systems such as aerobic treatment units (ATUs), performance-based treatment systems (PBTS), and/or innovative systems sold for use in Florida?**

NO Please tell us why you do not manufacture advanced systems for use in Florida and skip to Question 10 in the Training and Education Needs Section on page 5.

YES *[Please continue]*

MANUFACTURE AND SALE OF ADVANCED UNITS IN FLORIDA

2. Please list the TYPES of advanced systems your company manufactures for sale/use in Florida:

3. How many of each of the following systems did your company sell for USE IN FLORIDA during the last year?

Type of System	Number Sold
Aerobic Treatment Unit <i>[ATU only, i.e. not part of a PBTS]</i>	_____ systems
Performance-Based Treatment System (PBTS) <i>[Not counting innovative systems]</i>	_____ systems
Innovative Systems	_____ systems
Sand or Gravel Filters	_____ systems

4. What percentage of your company's annual revenue comes from the sale of the following TO CUSTOMERS IN FLORIDA?

_____ %	Advanced System Components
_____ %	Standard System Components

CONTACT WITH OTHER ENTITIES

5. To what extent does your firm/company INTERACT WITH EACH OF THE FOLLOWING ENTITIES CONCERNING THE ADVANCED SYSTEMS YOUR FIRM MANUFACTURES?

Entity	RARELY INTERACT	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME	OTHER [PLEASE SPECIFY.]
a. Maintenance Contractors for systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
b. Owners of systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
c. County Health Department Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
d. Engineers of the systems you manufacture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
e. Installers of systems you manufacture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____

AUTHORIZED MAINTENANCE CONTRACTOR

6. How many maintenance contractors are currently authorized by your company to service your company's advanced systems in Florida?

_____ Number of Authorized Contractors

7. What criteria/qualifications do you require maintenance contractors to meet in order to be authorized by your company to service the advanced systems you manufacture for sale in Florida?

8. Do you specify a region where a maintenance contractor can maintain your advanced systems within Florida?

YES

NO

9. Which of the following tasks do you usually specify that the maintenance contractor perform during routine inspections of the advanced systems you manufacture for use in Florida?

[Please ✓ All That Apply.]

Forms and Checklists

- Work through a manufacturer's or distributor's check list
- Work through the engineer's check list if engineered-designed
- Work through the County Health Department's check list
- Work through own check list

System Access

- Open covers to observe aerobic treatment chamber
- Open covers to observe trash tank/compartments
- Open covers to observe clarifier/dosing tank
- Leave surface undisturbed
- Open observation port

Equipment Checks

- Trigger alarm
- Trigger pumps
- Check that air supply is running

Maintenance Actions

- Inspect/clean effluent filter
- Inspect/clean air filter
- Inspect/clean air diffusers
- Pump tank(s) every _____ years
- Replace parts

- Other** *[Please describe.]*

Assessment of Operating Conditions


- Check clarity of water in treatment tank/clarifier
- Check for smell from treatment system
- Check sounds from treatment system
- Measure sludge accumulation
- Check how well solids settle in aerobic treatment chamber
- Record water meter reading
- Record number of dosing events or pump runtime (for dosed systems)
- Record presence, number, or duration of alarms
- Check and record pressure (drip systems)
- Check ponding depth in drainfield
- Check wetness in drainfield area
- Check presence and supply of chlorination tablets if system includes them
- Observe and record general appearance of treatment system functioning

Assessment of Effluent Quality

- Observe clarity of effluent in observation port
- Use test strips to assess effluent concentrations
- Use chemistry kits to assess effluent concentrations
- Take effluent samples for laboratory analysis
- Take groundwater samples

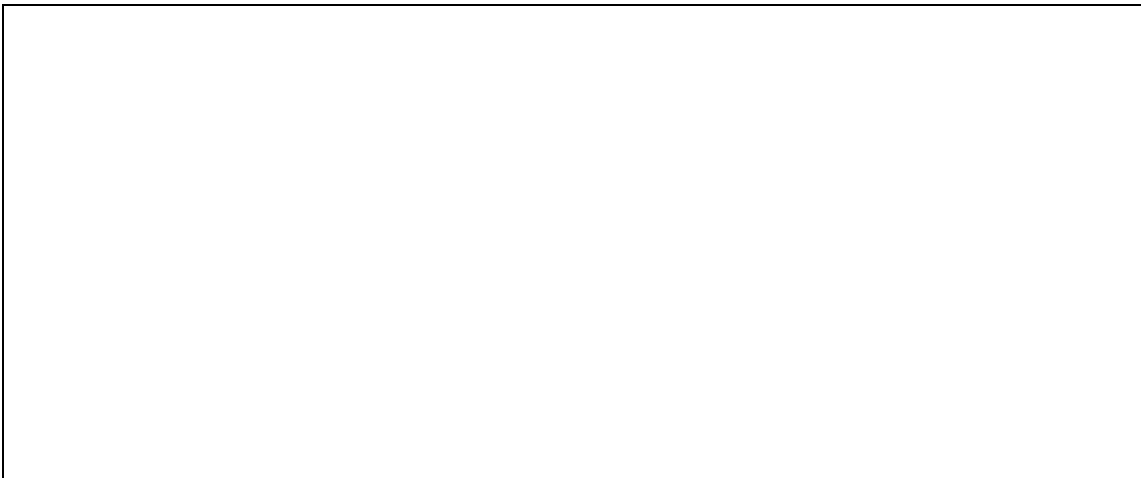
TRAINING AND EDUCATION NEEDS

10. Please tell us about educational/training opportunities related to advanced systems that you would like to be made available to your customers and maintenance contractors in Florida.



GENERAL ASSESSMENT

11. Please tell us about what aspects of the advanced system program in Florida are currently working well as it relates to construction permitting, design, installation, inspection, maintenance, and operating permitting:



12. Please tell us about any changes or improvements you would like to see to the following:

a. ATU regulation, permitting, and management in Florida:

b. PBTS regulation, permitting, and management in Florida:

c. Innovative System regulation, permitting, and management:

d. Sand or gravel filter regulation, permitting, and management:

e. Maintenance contractor regulation, permitting, and management:

BACKGROUND INFORMATION

Please give us information for contacting you if we have a question

Name of Your Business :
Address:
Phone:
Fax:
E-mail:
Contact Name:
Position:

Thank you for taking the time to help us with this study.

Please return this survey in the business reply envelope or fax to:

<p style="text-align: center;">Fax FSU Survey Research Laboratory 850.644.0792</p> <p style="text-align: center;">Use Business Reply Envelope or Mail to: FSU Survey Research Laboratory Florida State University MC 2221 Tallahassee FL 32306-2221</p>
