



# Florida Department of Health Bureau of Onsite Sewage Programs Research Review and Advisory Committee Meeting

**DATE AND TIME:** April 10, 2012 at 10:00 a.m. ET

**PLACE:** Florida Department of Health Southwood Complex  
4042 Bald Cypress Way, Room #240P  
Tallahassee, FL 32399

**Or via conference call / web conference:**

Toll free call in number: 1-888-808-6959

Conference code: 7427896255

Website: <http://connectpro22543231.na5.acrobat.com/rrac/>

This meeting is open to the public

**AGENDA:** FINAL 09April12

10:00 – 10:05	Introductions and Housekeeping
10:05 – 10:15	Review Minutes of Meeting January 4, 2012
10:15 – 10:45	Carmody Database System Update
10:45 – 12:30	Nitrogen Study Update <ol style="list-style-type: none"><li>1. Funding update</li><li>2. Discussion on draft Legislative Status Report</li></ol>
12:30 – 1:00	Update on 319 Grant: Performance of Advanced Onsite Sewage Treatment and Disposal Systems
1:00 – 1:30	Research Budget Update and Project Funding Priorities
1:30 – 1:45	Other Business
1:45 – 2:00	Public Comment
2:00 – 2:15	Closing Comments, Next Meeting, and Adjournment

NOTE: Time slots are approximate and may be subject to change.

**Florida Department of Health**  
**Research Review and Advisory Committee for the Bureau of Onsite Sewage Programs**

Approved Minutes of the Meeting held at the Southwood Office Complex, Tallahassee, FL  
April 10, 2012

**In attendance:**

- **Committee Members and Alternates:**

- In person:**

- Craig Diamond (member, Environmental Interest Group)
    - Carl Ludecke (vice-chairman, member, Home Building Industry)
    - Bill Melton (member, Consumer)
    - Clay Tappan (chairman, member, Professional Engineer)

- Via teleconference:**

- Quentin (Bob) Beitel (alternate, Real Estate Profession)
    - Taylor Brown (alternate, Division of Environmental Health)
    - Wayne Crotty (member, Septic Tank Industry)
    - Paul Davis (member, Division of Environmental Health)
    - Bob Himschoot (alternate, Septic Tank Industry)
    - Kriss Kaye (alternate, Home Building Industry)
    - Susan McKinley (alternate, Restaurant Industry)
    - Jim Peters (alternate, Professional Engineer)
    - Eanix Poole (alternate, Consumer)

- Absent members and alternates:**

- John Dryden (alternate, State University System)
    - Tom Higginbotham (alternate, Division of Environmental Health)
    - Geoff Luebkekmann (member, Restaurant Industry)
    - Tom Miller (member, Local Government)
    - David Richardson (alternate, Local Government)
    - John Schert (member, State University System)

- **Visitors:**

- In person:**

- Bruce French (York)
    - Shanin Speas Frost (DEP)

- Via teleconference:**

- Damann Anderson (Hazen and Sawyer)
    - Alice Berkley (Commissioner Brummer)
    - Shirish Bhat (ECT)
    - Scott Carmody (Carmody)
    - Kim Dinkins (Marion County)
    - Roxanne Groover (FOWA)
    - Richard Hicks (DEP)
    - Josefin Hirst (Hazen and Sawyer)
    - Len Moore
    - Maria Pecoraro (Rep. Nelson)
    - Andrea Samson
    - Patti Sanzone (DEP)
    - Pam Tucker

- **Department of Health (DOH), Bureau of Onsite Sewage Programs:**

- In person:**

- Kara Loewe, Distributed computer Systems Consultant
    - Eberhard Roeder, Professional Engineer
    - Elke Ursin, Environmental Health Program Consultant

- Via teleconference:**

- Ed Barranco, Environmental Administrator
    - Kim Duffek, Environmental Health Program Consultant

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- 1. Introductions** – Eight out of ten groups were present, representing a quorum. The groups that were not represented were the State University System and Local Governments. Chairman Tappan called the meeting to order at 10:02 a.m. The agenda was outlined, introductions were made, and some housekeeping issues were discussed. There were no changes to the committee since the last meeting.
- 2. Review of previous meeting minutes** – The minutes of the January 4, 2012 meeting were reviewed.

**Motion by Craig Diamond, seconded by Carl Ludecke, to approve the minutes as presented. All were in favor and none opposed and the motion passed unanimously.**

- 3. Carmody Database System Update** – Scott Carmody presented on his tracking database system which is funded through the Florida Department of Environmental Protection (DEP). This web-based database tracks various things associated with onsite sewage systems (maintenance and management of advanced treatment systems, system locations, etc.) He demonstrated how the system works by sharing his screen with meeting attendees. He said that he has been working in the onsite field for about 12 years, in 14 states, and is expanding to the Cayman Islands and Australia. He has been working in Florida for almost all of the 12 years that he has been in business. The first step in setting up a database for a new client is to establish what data is available, and build a starter inventory. The system has five different user levels: contractor, view only, regulator, state, and national. He indicated that the system is very flexible. The system allows for interaction and communication between contractors and regulators. The system tracks by components on a property, not by address, because one system may have several different components. The contract with DEP allows county health departments to use this program. It is a voluntary system, with all of the counties having access, and there is no requirement to use the system. Scott Carmody stated that he believes his system is tracking 85-90% of all ATUs in the ground in Florida. Clay Tappan asked if there are any mandatory fields to make it easier for data to roll up to the state level for analysis and Scott Carmody stated that there are no mandatory fields and that each county can use the system to best serve their needs. Scott Carmody indicated that he does not have the power to tell the counties what to do; he is providing a tool for them to use. The system captures failure rates for state inspections and it was clarified that failure does not necessarily mean that there is sewage on the ground because the system is failing, it means that the system inspection failed, which could be from various issues (i.e. the maintenance contract has expired). Quentin Beitel asked how signatures certifying these reports are tracked in the database and Scott Carmody stated that it is tracked by user name and password. Quentin Beitel asked if this system is just for septic contractors and regulators or whether private entities that want to track their onsite sewage systems could use the system too, and Scott Carmody answered that anyone can use the system and that he is doing something similar to this right now to track grease interceptor servicing. Clay Tappan asked if anyone could request a password and account and Scott Carmody stated that the program is designed for reporting but that data requests could be made which would need to be cleared with the County Health Department. Elke Ursin asked if she could obtain a password to see the state regulator information and Scott Carmody asked for an upload of information from the Department of Health's Environmental Health Database. There was some discussion on integrating Carmody with the Department of Health's Environmental Health Database. This is currently being worked out by DOH. There have been some communication issues between DOH and Carmody, and this discussion will continue at another time. It was clarified that CHD's are not penalized in their audit for any data contained in the Carmody system.

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He then demonstrated the septic search website (<http://www.septicsearch.com>). This website allows anyone to access service record history and permit documents for a component/property. Some realtors link to this in the MLS system. Scott Carmody stated that in order for this to be a successful program all of the stakeholders need to come together: owners, contractors, regulators, real estate professionals, and Florida citizens. Quentin Beitel stated that he wants to make sure that consideration is made to the certification process for inspections in light of any new legislation that may come through. Taylor Brown spoke about the experience of using the Carmody system in Lee County and that it has helped them a lot. Bill Melton asked about the status of the funding for this program and Scott Carmody stated that it is funded by DEP and the contract was just renewed for another three years.

- 4. Nitrogen Study Update** – Elke Ursin presented on the nitrogen reduction strategies study. She started with a funding update. The House and Senate budget includes \$1,500,000 in both budget and cash for continuation of the study. The budget was sent to the Governor on April 9<sup>th</sup>, and Elke Ursin’s understanding was that the governor has two weeks to review the budget. Once the Governor has completed his review another RRAC meeting may need to be set to discuss the process forward. Quentin Beitel suggested scheduling this meeting soon so that the determination of the process forward can be done quickly. The legislative status report is due on May 16, 2012 to the Governor, Speaker of the House, and President of the Senate. The draft report was edited page by page. Elke Ursin stated that in order to meet internal review times the report will need to begin the routing process this week. Due to the uncertainty regarding the funding there were several places in the report which were marked as “pending the Governor’s action”. This language may need to be changed when a decision is made.

**Motion by Quentin Beitel, seconded by Carl Ludecke, to allow staff to update the language throughout the report regarding the Governor’s action on the budget. All were in favor and none opposed and the motion passed unanimously.**

A new table (Table 2) was proposed to be inserted in Section 2 to show the field work status by county for Tasks B and C. There was a discussion on what information this table should include.

**Motion by Carl Ludecke, seconded by Craig Diamond, to adopt Table 2 as formatted. All were in favor and none opposed and the motion passed unanimously.**

**Motion by Carl Ludecke, seconded by Craig Diamond, to authorize staff to make the changes to the status report discussed during the meeting. All were in favor and none opposed and the motion passed unanimously.**

Quentin Beitel asked if a cover letter goes with this report and Elke Ursin stated that there is one and it has been drafted. The cover letter has a standard format and includes information straight from the executive summary of the report.

Elke Ursin provided a brief update on the progress the study has made since the last meeting. The monitoring of the mound system at the Gulf Coast Research and Education Center has been completed. Two field site sample events have been completed as part of Task B for a site in Wakulla County. One field site sample event has been completed as part of Task C for a site in

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Seminole County, and another field site property owner agreement has been signed for a site in Polk County. Progress reports for both the simple and complex soil tools have been submitted and reviewed by staff.

- 5. Update on 319 Grant: Performance of Advanced Onsite Sewage Treatment and Disposal Systems** – Elke Ursin gave an update on the project. This project is to assess water quality protection by advanced (ATU, PBTS, etc.) systems throughout Florida. The grant period is now over, having ended on September 30, 2011. The final invoice and final progress report has been sent to DEP in 2011. Final reports have been submitted for the Monroe Diurnal and Seasonal Variability of Advanced Systems as well as the final report on the Database of Advanced Systems outlining the database development, database structure, and summary statistics.

Elke Ursin presented on the progress that has been made on the remaining tasks associated with this project. Data entry is ongoing with several bureau staff assisting. As of April 5, 2012, 220 out of over 1,000 records still need data entry and 399 records need a quality control review done on the data entry. The ones that need data entry are also included in the quality control review number. Elke Ursin explained that each record can take up to 20 minutes to enter and the quality control often takes almost the same amount of time. She stated that there are a lot of details that are captured with this data entry, but it is time consuming. She stated that staff has started analyzing the sample data. There is a task looking at management practices that is currently ongoing. A database was created linking program evaluations over the past ten years with the survey results for regulators and system owners/users. There will also be links made between the county program evaluation, county survey information, and the sample results. Analysis on this has begun, and will be completed and summarized in the final task report and in a case study booklet format. The final project report is anticipated to be written after all the data entry and data analysis has been completed. The draft report will be presented to the RRAC for review prior to finalization and submission to DEP.

- 6. Research Budget Update and Project Funding Priorities** – Elke Ursin presented the current research budget. Funding for the research program comes from a \$5 surcharge on new septic system permits. The total revenue collected from July 1, 2011 through March 27, 2012 is \$41,400 and the total expenditures are \$53,070. She explained that this is not for a full year as this fiscal year is still in progress. She presented the 2010 – 2011 budget numbers: \$55,738 in revenue and \$76,156 in expenditures. The total research program ending cash balance as of March 27, 2012 is \$470,785.

Elke Ursin has been tasked with trying to find out how to do research projects at little to no cost. She went through each research project and outlined what could be done on each project utilizing mostly staff time. There are two projects that have been on the research project list for some time, and then five projects that were prioritized by the RRAC in early 2011.

The Alternative Drainfield Product Assessment project's purpose is to compare the functioning of alternative drainfield materials to standard aggregate. This was originally approved by the RRAC in 2006, a contract was issued, but was canceled due to industry concerns. The project was re-prioritized in 2008 and was split into three phases. Phase I was to evaluate existing data, phase II was to create an advisory group to find ways to fill the data gaps, and the third phase was to gather the data to fill in the gaps. RRAC directed staff in 2010 to start phase I and some work has been done. There was a discussion on the work that NSF has done looking at alternative drainfield products.

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The objective of the Columbia County Well Sampling project is to determine whether pathogens and nutrients in well water on river-front lots are elevated and affected by either river or septic system influences, and whether there is any seasonal variability in this. The project was approved by RRAC for every budget cycle since 2007 and the cost is lab analysis only. There was a discussion on the project and staff is to determine the sampling needs and costs and then come back to RRAC for further discussion.

The continuation of the 2009 inventory of OSTDS in Florida project would update the inventory and develop a way to automate this process. This was the #1 ranked research project in 2011. Most of the tasks associated with the approach will cost money and very little can be done by research staff alone. Elke Ursin stated that there has been a lot of interest in the inventory information from various places and that it would be a good first step for those counties that are going to proceed with an evaluation program. There was a general consensus from RRAC that this is still a very high priority project. Bill Melton asked why the research funds that are listed in the budget could not be used and Elke Ursin stated that we have the cash but not the spending authority. There was interest from the RRAC to request the authority to spend funds on this project.

Next, the project looking at the effectiveness of outlet filters was discussed. This project is to help determine whether outlet filters are performing as expected, determine maintenance frequency, and determine whether approval standards are adequate. NSF has established a task group to address outlet filter concerns, but this effort has been more focused on determining the function of outlet filters and developing a testing protocol, not necessarily addressing what happens in the field.

A project looking at the life expectancy of onsite systems was discussed. This project is to determine the life expectancy of a septic tank and various kinds of drainfields. This project could be done by staff, but it will be time intensive.

Next, a project looking at drip disposal with septic tank quality effluent was discussed. This project is to determine the effectiveness of permitting drip disposal using septic tank quality effluent and to determine maintenance requirements. The Nitrogen Reduction Strategies Study is testing this at the test center. A literature review of existing research could be done by research program staff.

The final project discussed was one looking at the correlations between water quality, OSTDS, and health effects which would be using GIS to perform an analysis based on existing data. Staff could gather and analyze the data but this would be a time intensive project.

After hearing the list of projects, Elke Ursin asked the RRAC for direction on how to prioritize her time with the understanding that there would be little to no research funds available. There was a discussion on the possibility of requesting from DOH the authority to spend some of the research funds on the inventory project and some of the other projects. A legislative budget request may need to be applied for. Elke Ursin will look into options and report back to the RRAC.

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**Motion by Craig Diamond, seconded by Bill Melton, to approve the re-ranking of research priorities as follows:**

- 1. Completion of 319 project**
- 2. Alternative Drainfield project**
- 3. Outlet Filter project**
- 4. Drip irrigation project**

**All were in favor and none opposed and the motion passed unanimously.**

**Motion by Craig Diamond, seconded by Bill Melton, for staff to provide RRAC with the proper procedure on how RRAC can request authority to spend research funds. All were in favor and none opposed and the motion passed unanimously.**

- 7. Other Business** – There was no discussion on other business.
- 8. Public Comment** – The public were allowed to comment throughout the meeting. There was no additional public comment.
- 9. Closing Comments, Next Meeting, and Adjournment** – Topics for the next RRAC meeting will be to discuss the process forward with the nitrogen study depending on the results of the final 2012-2013 FY budget. RRAC directed Elke Ursin to send an email once a decision has been made regarding the budget. The next RRAC meeting will occur at some point in the future, with a date to be determined via email. The meeting adjourned at 2:37 p.m.

**Motion to adjourn by Bill Melton, seconded by Clay Tappan. All were in favor and none opposed and the motion passed unanimously.**



Department of Health  
Bureau of Onsite Sewage Programs  
Research Review and Advisory Committee

Tuesday April 10, 2012  
10:00 am - 2:15 pm



# Agenda:

- Introductions and Housekeeping
- Review Minutes of Meeting January 4, 2012
- Carmody Database System Update
- Nitrogen Study Update
  - Funding update
  - Discussion on draft Legislative Status Report
- Update on 319 Grant
- Research Budget Update and Project Funding Priorities
- Other Business
- Public Comment
- Closing Comments, Next Meeting, and Adjournment



# Introductions & Housekeeping

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- Roll call
- Identification of audience
- How to view web conference
- DO NOT PUT YOUR PHONE ON HOLD!!!!
- Download reports:

<http://www.myfloridaeh.com/ostds/research/Index.html>



# Introductions & Housekeeping

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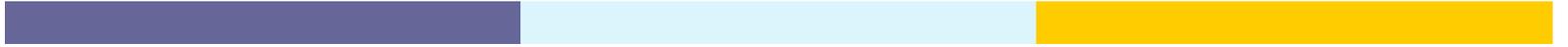
There have been no changes to the committee composition since the January meeting



# Review Minutes of Meeting January 4, 2012

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- See draft minutes



# Carmody Database System Update

- Presented by Scott Carmody



# Florida Onsite Sewage Nitrogen Reduction Strategies Study

**Purpose:** Develop passive strategies for nitrogen reduction that complement use of conventional onsite sewage treatment and disposal systems, and further develop cost-effective nitrogen reduction strategies



# Florida Onsite Sewage Nitrogen Reduction Strategies Study

- The House and Senate budget includes \$1,500,000 in budget and cash for continuation of the study
- Budget has not yet been sent to the Governor for review



# Florida Onsite Sewage Nitrogen Reduction Strategies Study

- Legislative Status Report due on May 16, 2012 to the Governor, Speaker of the House, and President of the Senate



# Florida Onsite Sewage Nitrogen Reduction Strategies Study

- Switch to Draft Legislative Report



# Florida Onsite Sewage Nitrogen Reduction Strategies Study

Progress since last meeting:

- Completion of monitoring of mound system at GCREC
- Task B Wakulla County two field site sample events
- Task C Seminole County field site sample event and another field site selection property owner agreement (Polk County)
- Task D Simple and Complex soil tool progress reports submitted and reviewed by staff



# 319 Project on Performance and Management of Advanced Onsite Systems

**Purpose:** Assess water quality protection by advanced OSTDS throughout Florida

**Progress:**

- Granting period is now complete
- Final invoice sent to DEP in 2011
- Final report submitted for Monroe Diurnal and Seasonal Variability of Advanced Systems
- Final report submitted for Database of Advanced Systems



# 319 Project on Performance and Management of Advanced Onsite Systems

Progress cont. :

- Data Entry:
  - Data entry is ongoing with several bureau staff assisting
  - As of 4/5/12:
    - o 220 systems need data entry
    - o 399 systems need a quality control review



# 319 Project on Performance and Management of Advanced Onsite Systems

Progress cont. :

- Management Practices
  - Database was created linking program evaluations over past 10 years with survey results for regulators and system owners/users
  - Analysis has been done and will be summarized in the final task report
  - Linking between this database and the sample results will also be done and summarized in the final task report



# 319 Project on Performance and Management of Advanced Onsite Systems

Progress cont. :

- Final Project Report
  - Anticipated to be written after all data entry and data analysis has been completed
  - Draft report to be presented to RRAC for review prior to finalization and submission to DEP



# Research Budget Update

Fiscal Year 2011-2012 (as of 3/27/2012):

Total Revenue	\$41,400
Total Expenditures	\$53,070
Ending Cash Balance (as of 3/27/2012)	\$470,785

Fiscal Year 2010-2011:

Total Revenue	\$55,738
Total Expenditures	\$76,156



# Project Funding Priorities

## Alternative Drainfield Product Assessment

- Compare the functioning of alternative drainfield materials to standard aggregate
- Originally approved in 2006 - contract issued but canceled due to industry concerns
- Re-prioritized in 2008
- Split into 3 phases:
  - Phase I: evaluate existing data (cost = staff time)
  - Phase II: create advisory group (manufacturers, contractors, CHD's) to find ways to fill data gaps
  - Phase III: gather data to fill the data gaps
- RRAC directed staff in 2010 to start Phase I, some work has been done but most of staff time has been devoted to other projects



# Project Funding Priorities

## Columbia County Well Sampling

- Determine whether pathogens and nutrients in well water on river-front lots are elevated and effected by either river or septic system influences, and whether there is any seasonal variability in this
- This project has been approved by RRAC every budget cycle since 2007
- Cost: \$5,000
- In the past, there were issues in finding a lab. Cost is for lab analysis only.



# Project Funding Priorities

## Continuation of Inventory of OSTDS in Florida

- Update 2009 inventory and develop method to automate this process
- Prioritized in 2011: #1 Ranked project
- Approach: see project description
- Budget: \$150,000 over 1-2 years
- Most of the tasks will cost money, very little can be done by research program staff



# Project Funding Priorities

## Effectiveness of Outlet Filters

- Determine whether outlet filters are performing as expected, determine maintenance frequency, and determine whether approval standards are adequate
- Prioritized in 2011: #2 Ranked project
- Approach: see project description
- Budget: Phase I: \$35,000
- NSF has established a task group to address outlet filter concerns (Sept 2011)
- Surveys could be developed, distributed, and analyzed by staff with RRAC input



# Project Funding Priorities

## Life Expectancy of Onsite Systems

- Determine life expectancy of a septic tank and various kinds of drainfields
- Prioritized in 2011: #3 Ranked project
- Approach: see project description
- Budget: \$50,000
- Much of this project could be done by staff, will be time intensive



# Project Funding Priorities

## Drip Disposal with Septic Tank Quality Effluent

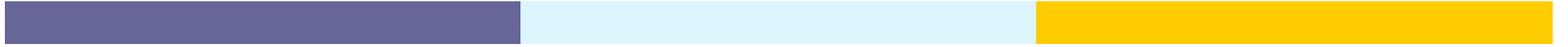
- Determine the effectiveness of permitting drip disposal using septic tank quality effluent. Determine maintenance requirements.
- Prioritized in 2011: #4 Ranked project
- Approach: see project description
- Budget: Up to \$100,000
- Nitrogen Reduction Strategies Study is testing this at the test center
- Literature review of existing research could be done



# Project Funding Priorities

## Correlations Between Water Quality, OSTDs, and Health Effects

- Perform an analysis using GIS of any correlations between water quality in drinking water wells, OSTDs, and health effects
- Prioritized in 2011: #5 Ranked project
- Approach: see project description
- Budget: \$5,000 if conducted in house
- Staff could gather and analyze data. This will be a time intensive project.



# Other Business



# Public Comment



# Next Meeting

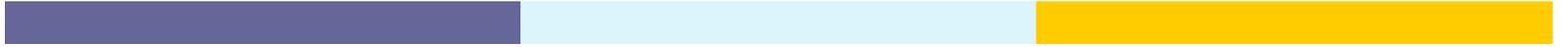
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## **Upcoming meeting topics:**

- Discussion on 319 grant report on the performance of advanced OSTDS in Florida
- Discussion on process forward with research priorities

## **Proposed dates for next meeting:**

- Will send email to RRAC at a future date to determine next meeting



# Closing Comments and Adjournment