

RESEARCH REVIEW AND ADVISORY COMMITTEE

ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS

ADVISORY TO THE DEPARTMENT OF HEALTH

AUTHORITY: SECTION 381.0065(4)(o), FLORIDA STATUTES

Minutes of the Meeting held at the Southwood Office Complex, Tallahassee, FL
March 3, 2015

In attendance:

Research Review and Advisory Committee (RRAC) Members and Alternates:

Via teleconference:

- Quentin (Bob) Beitel (alternate, Real Estate Profession)
- Carl Ludecke (vice-chairman, member, Home Building Industry)
- Bill Melton (member, Consumer)
- Christopher Pettit (member, Local Government)
- Matt Surrency (alternate, Local Government)
- Clay Tappan (chairman, member, Professional Engineer)
- Robert Washam (alternate, Consumer)

Absent members and alternates:

- Ed Dion (alternate, Home Building Industry)
- Tony Macaluso (alternate, Real Estate Profession)
- Daniel Meeroff (alternate, State University System)
- John Schert (member, State University System)

Other attendees:

In person:

- Damann Anderson (Hazen and Sawyer)
- Ed Bettinger (DOH, Water Programs)
- Douglas Buck (Florida Home Builders)
- Bob Himschoot (Septic Industry)
- Mark Repasky (Restaurant Industry)

Via teleconference:

- Bill Brookman (DOH, Monroe)
- Taylor Brown (DOH, Lee)
- Linda Clemens (DEP, Office of Water Policy)
- Jaime Cook (DOH, Collier)
- Cheryl Dunn (DOH, Indian River)
- Tom Joos (DOH Office of Legislative Planning)
- Rick Hicks (DEP)
- Jim Love (DOH, Lee)
- Meagan Parrish (DOH, Washington)
- Chris Petersen (PTI and FOWA)
- Eanix Poole
- Barbara Progulske (DOH, Indian River)
- Christopher Rowe (PTI)
- Andrea Samson (Coalition of Property Rights)
- John Shearer
- Gary Smith
- Pam Tucker
- Jennifer Walton (DOH, Disaster Preparedness)

Department of Health (DOH), Onsite Sewage Program Section:

In person:

- Andrew Reich, Acting Chief Bureau of Environmental Health
- Eberhard Roeder, Professional Engineer
- Elke Ursin, Environmental Health Program Consultant

Via teleconference:

- Ed Barranco, Environmental Administrator, Onsite Sewage Programs
- Gerald Briggs, Environmental Administrator, Water and Onsite Sewage Programs

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- 1. Introductions** – Five out of six groups with non-expired members were present, representing a quorum. The State University System was not represented. Staff are actively working on filling four of the committee positions: Florida Department of Health, septic tank industry, environmental interest group, and restaurant industry. Chairman Tappan called the meeting to order at 9:35 a.m. The agenda was presented, introductions were made, and some housekeeping issues were discussed.
 - 2. Review of previous meeting minutes** – The RRAC reviewed the minutes of the February 26, 2014 meeting. Quentin Beitel asked whether follow-up occurred with Senator Hays’s office as indicated in the minutes. Elke Ursin said that she would look into this and report to the committee.

Motion by Bill Melton and seconded by Quentin Beitel, for the RRAC to approve the minutes of the February 26, 2014 meeting as submitted. All were in favor, none opposed, and the motion passed unanimously.

- 3. Nitrogen Study Update** – Elke Ursin presented a background of the study. In 2008, the Florida Legislature directed the Department of Health to develop cost-effective nitrogen reduction strategies for onsite sewage treatment and disposal systems (OSTDS). In January 2009, the Department awarded a 6-year, \$5-million contract to a project team made up of nationally recognized experts led by Hazen and Sawyer. The Department and its Research Review and Advisory Committee (RRAC) oversee the project, with input from the Department of Environmental Protection. To date, the Legislature has appropriated \$4.7 million for the project. The objectives of the study are to develop cost-effective, passive strategies for nitrogen reduction from onsite sewage; characterize nitrogen removal in the soil and shallow groundwater; and develop simple models on fate and transport of nitrogen in soil and groundwater. The project was split into four main tasks:
 - Task A** - Prioritize technologies for testing at existing home sites and perform controlled tests at a test facility to develop design criteria for new passive nitrogen reduction systems.
 - Task B** - Install top-priority nitrogen reduction technologies at existing homes, with documentation of performance and cost.
 - Task C** - Perform field evaluations of nitrogen reduction in Florida soils and shallow groundwater, and provide data for calibration of a simple planning model (see Task D).
 - Task D** - Develop a simple fate and transport model of nitrogen from OSTDS for use in assessment, planning, and system siting.

The results of this study will benefit Floridians by providing field tested designs for “passive” systems effective at removing nitrogen and user-friendly, system cost estimates and cost comparisons to existing approved systems, nitrogen fate and transport models for estimating nitrogen contribution from onsite systems, and options for nitrogen reducing onsite systems in sensitive watersheds where sewers are not feasible. Elke Ursin presented an update on the study regarding the project timeline extension, accomplishments to date, and the current project status. The Legislative language from the 2014-2015 General Appropriations Act, had language in it to allow the contract to be extended to complete the project. The contract expired in mid-January of 2015 and was renewed for one month while the Department completed a single source purchase order to use the funds remaining until June 30, 2015. Elke Ursin provided an update on the project funding and spending to date. The current appropriated cash amount for the project is just over \$4.7-million of the \$5-million original funding estimate (\$268,973 short from being fully funded).

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Elke Ursin said that the first \$2.8-million of project funding was transferred to the Department from a DEP trust fund. This carried over from year to year until it was fully spent, and then the subsequent cash appropriations were from either the Department's Grants and Donations fund or from the Department's General Revenue fund. General Revenue must be spent within the fiscal year with no carry-over of funds. Quentin Beitel asked for clarity on whether the project has been extended to January 2016 or June 2015. Clay Tappan said he had similar questions and wondered if the RRAC should use this setting to request additional funding from the Legislature. Damann Anderson said that the plan was to go after the final funding during this Legislative session, and that is how it was done every other year. Elke Ursin said that the Department has provided a status update to the Legislature whenever they have been requested, and the report includes recommendations from the RRAC on project funding. This is a Legislative project and the Department has never included this project in their official Legislative budget requests. Carl Ludecke asked who cut the time schedule short and Elke Ursin said that the time schedule is based on the available funding. Andy Reich, Bureau Chief for Environmental Health, said because funding only goes to the end of this fiscal year (June 30, 2015) the Department wanted to be sure it receives the most deliverables that can be submitted by that time. Clay Tappan said that the RRAC has been behind this project for six years, and RRAC has historically supported allowing for more time and continued funding. Bob Himschoot said that this project is critical to the onsite wastewater industry, the homebuilders, and the realtors. Doug Buck with the Florida Homebuilders Association said that he understands that funds go away each year and very little of it is carried forward. The Florida Homebuilders Association and the Florida Realtors Association have already had conversations with the appropriate committee chairs, which oversee the Department's budget, to make sure that the correct amount of money is put in the budget to finish the project. He asked for clarification on the amount of funds and the time required. Clay Tappan said that what he hears from the discussion so far is that the RRAC continues to support the project and he would like to know what to do to move forward. He asked that Elke go over the current project status and then continue the discussion.

Elke Ursin summarized some of the project accomplishments. A facility was constructed at the University of Florida Gulf Coast Research and Education Center in Wimauma, to evaluate pilot-scale configurations for full-scale systems, resulting in options that consistently reduced nitrogen by 95% or more. Seven full-scale systems were installed at existing homes throughout the state with multiple configurations that were based on the pilot-scale results. Sampling is now complete for all systems as of February 2015. Some of the preliminary results indicate that there is about 90-95% nitrogen reduction prior to the drainfield. Four detailed soil and groundwater assessments were completed to evaluate nitrogen under existing septic systems over a 12-month period. The drainfield at the University of Florida Wimauma facility was also monitored, and several mini mounds were constructed to allow for more controlled testing and plume identification in the soil and groundwater. Elke Ursin showed a graphic representation of sampling results for one home site, which saw a marked improvement in groundwater nitrogen concentration after the installation of a passive system. A model for nitrogen fate and transport through soil to groundwater has been developed and validated with field data. Bob Himschoot mentioned that the Department of Environmental Protection uses nitrogen-loading estimates from onsite sewage treatment and disposal systems for their Basin Management Action Plan to determine contribution, and he questions the data used to calculate the loading estimates. He would like to see the report used to determine the loading estimates. Rick Hicks mentioned that he could provide the nitrogen source

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inventory report for Silver Springs, which was done based on literature values and not based on an actual monitoring study. This report is a draft report. Rick Hicks stated that it might be good for Florida State University to provide an update on their modeling work to the RRAC at a future meeting, and Elke Ursin said that would be a good idea. Development of a model for nitrogen transport in groundwater has also started. Elke Ursin presented what is planned to be complete by June of 2015 under the current funding level and schedule.

- Completion of field monitoring to determine performance and cost of technologies
- Calibration and refinement of nitrogen fate and transport models
- Model performance evaluation and creation of a user guide for the model tools
- Data analysis and development of summary reports

Damann Anderson said that what will not be done is an overall recommendation for onsite sewage nitrogen reduction strategies, and said that he envisions this strategy report will show how both the groundwater modeling work and the treatment technologies developed during this project can be used to develop a comprehensive look at strategies for onsite wastewater systems in Florida. The treatment systems developed in this project will have a final report written, which will show cost information and design recommendations, but will not tie to the groundwater modeling work. Some of the other tasks that will not be completed under the current time and funding constraints are:

- Report summarizing all work done for Task A (previous RRAC discussions that this would become the final project report)
- Report summarizing all work done for Task C
- Technical description of nitrogen technologies
- Final Task D user guide (will get draft)
- Decision-making framework considering model uncertainty
- Innovative system applications
- Vendor agreements

There was a discussion on whether this could all be accomplished with the full \$5-million funding and a time extension to mid-January 2016 and Damann Anderson said that they are only focusing on the things that are due June 30, 2015 and have stopped work on all unfunded tasks. He said that the biggest problem with this project is the stop and start issues, and that is why this project has taken so long. Clay Tappan said that he wants to outline the steps necessary to seek and obtain funding from the Legislature. Damann Anderson said that in the past the interest groups pushed this project forward within the Legislature. Andy Reich said that the decision on which tasks to complete by the end of June was largely based on finishing up tasks like the field sampling and system design and if additional funds were made available after June other tasks could be reopened and completed. Elke Ursin said that the original contract number CORCL was extended for one month, until mid-February, and then a single-source purchase order was issued until the end of June 2015 with a statement of work that has been shared with the committee, other interested parties, and has been posted on the RRAC website. Clay Tappan asked whether the single source could be extended, and Elke Ursin said that purchase orders expire at the end of the fiscal year and that a new purchase order would need to be issued. Andy Reich said that if the Legislature appropriates the funds, and the Department has the budget authority, the Bureau would move forward with implementing the direction from the Legislature through the Department. Gerald Briggs reiterated that this has always been a Legislative project and has not been included in the Departments budget request. He said that the Legislative status reports have been the mechanism for letting the Legislature know RRAC's recommendation for the budget line item. Elke Ursin pulled up the last Legislative report from February 2014, which showed \$261,636 as required to complete

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the project. She said that that number was an estimate as of December 2013 when the report was drafted, and has changed slightly after the actual 2013-2014 spending was completed in June 2014. The amount needed to complete the project as originally scoped and assuming that all authorized funds are spent this fiscal year, is \$268,973. Bill Melton said that if the project had been completed on time, none of this would be an issue. Clay Tappan said that he knows that there are several factors that have led to the project extending beyond the original schedule, and that there may be additional costs that have come because of the revised schedule. He asks whether the cost of the project should be looked at in today's dollars versus 2008 dollars. Damann Anderson said he would ask for \$500,000 and an extension through the end of the next fiscal year (June 30, 2016). Doug Buck said that the Legislature is not giving any more money than what is needed. Bill Melton said that a month ago the project was going to be finished for \$5-million, and asked why this amount has now changed. Quentin Beitel said that it might be due to the project stops and go's. Damann Anderson said that he has tried to hold this budget as hard as he can for six years and not have an increase. He said that the best way forward is not to just reiterate the same tasks as in the original contract, but to focus on planning for implementation of nitrogen reduction strategies. Clay Tappan said that this is not the same economic environment as in 2008 but that Hazen and Sawyer needs to justify any cost increase. Damann Anderson said that he would need to write a detailed statement of work and budget for this. Elke Ursin suggested RRAC should review and approve any changes. Clay Tappan said that it sounds like the process has started with the Legislature to see about funding the completion of the project, and that the final dollar amount is still to be refined. Pam Tucker wrote in the chat box it would be good to get a letter of support from Technical Review and Advisory Panel (TRAP) as well. Bill Melton said that he has no issue with asking for more time for the project but does have an issue with asking for more money.

Motion by Quentin Beitel and seconded by Carl Ludecke that the RRAC recommends the funding and time required to complete the study in accordance with the Legislative mandate be made available not to exceed \$500,000 or extend past June 30, 2016. The Chair of the RRAC will work with the contract provider to determine the requested funding and time required and will draft a letter to the Governor, Speaker of the House, and President of the Senate stating the recommendation of the committee. Of the five voting members present, four were in favor (Quentin Beitel, Carl Ludecke, Christopher Pettit, and Clay Tappan), and one opposed (Bill Melton). Mr. Melton opposed funding exceeding the original \$5-million. The motion passed.

There was a discussion on the process for sending a letter. Elke Ursin said that each previous project year the Legislature tasked the Department to submit a status report to the Governor, Speaker of the House, and President of the Senate. This year's appropriation language did not include submission of a status report, so the letter would need to come from RRAC's chair. Clay Tappan, as the chair of the RRAC, will write a draft of the letter and will seek support of the TRAP. He will work with the contract provider to determine the requested funding and time required. The draft letter will be sent to Elke Ursin who will distribute it to the RRAC, there will be a 5-day comment period, and if no substantial edits, the letter will be sent. RRAC directed staff to schedule a follow-up meeting mainly as a backup in case there is a need for discussion about the letter.

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Quentin Beitel asked if there is legislation that restricts agencies for implementing nitrogen reduction standards and Elke Ursin said that it is in the Legislative implementing language and Gerald Briggs said that it is also in the *Florida Statute* (381.0065(4)(x), F.S.) Bob Himschoot said that time is of the essence with the Legislative session starting today and ending in 60 days. Clay Tappan and Quentin Beitel thanked RRAC for their patience, hard work, and continued support for the project. The public was allowed to comment throughout.

4. **Updates on Other Projects** – Elke Ursin gave an update on the Florida Water Management Inventory Project. The goal of the project is to map the drinking water source and wastewater treatment method for every built property in Florida. The history of the project was that in 2009 the Legislature tasked the Department to create an inventory of all the septic systems in the state. The Department selected a provider through a competitive solicitation process and they did the best they could with the time and money available. RRAC has prioritized a project to update this inventory. CDC Emergency Preparedness funds were made available in April of 2009 to kick start this project, Onsite Sewage research program funds are currently being used to fund the project and DEP/EPA funding is being applied for. Three people have been hired to work on this project: a GIS expert, a project manager, and a data processor. Several volunteers are also working on the project. The state has been split up into different phases. The first phase was a pilot phase where we developed and tested all of our processes. The project is currently in the data gathering effort for phase 2 and the kickoff for phase 3 will start at the end of March. The mapping effort follows the data gathering within a phase. Mapping has been completed for Alachua and Indian River Counties. In Alachua, out of all the parcels that are built, 96.5% have some sort of wastewater data and 73% have drinking water data. Indian River had only 9% of all built parcels with unknown drinking water information and only 1.9% of all parcels with unknown wastewater information. Andy Reich suggested that a presentation to County Commissioners would be good.
5. **Other Business** – None.
6. **Public Comment** – The public commented throughout the meeting.
7. **Closing Comments, Next Meeting, and Adjournment** – There was previous discussion that a meeting will be advertised to occur in the next two weeks to discuss the letter. The plan is to have Damann Anderson present on the project sometime in June 2015.