In attendance:

- **Committee Members and Alternates:**
  - In person:
    - Craig Diamond (member, Environmental Interest Group)
    - Bill Melton (member, Consumer)
  - Via teleconference:
    - Quentin (Bob) Beitel (alternate, Real Estate Profession)
    - Taylor Brown (alternate, Division of Environmental Health)
    - Paul Davis (member, Division of Environmental Health)
    - Ted Kirk (member, Septic Tank Industry)
    - Carl Ludecke (vice-chairman, member, Home Building Industry)
    - Tony Macaluso (alternate, Real Estate Profession)
    - Daniel Meeroff (alternate, State University System)
    - Jim Peters (alternate, Professional Engineer)
    - John Schert (member, State University System)
    - 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)
    - Tom Higginbotham (alternate, Division of Environmental Health)
    - Bob Himshooot (alternate, Septic Tank Industry)
    - Geoff Luebkemann (member, Restaurant Industry)
    - Susan McKinley (alternate, Restaurant Industry)
    - Christopher Pettit (member, Local Government)

- **Visitors:**
  - Via teleconference:
    - Damann Anderson (Hazen and Sawyer)
    - Nanci Cornwell
    - Jason Dickey
    - Anthony Gaudio
    - Charles Gauthier (DEP)
    - Tom Joos (DOH Office of Legislative Planning)
    - Rick Hicks (DEP)
    - Josefin Hirst (Hazen and Sawyer)
    - Pam Tucker
    - Dustin Sabins
    - Greg Sawka

- **Department of Health (DOH), Onsite Sewage Program Section:**
  - In person:
    - Gerald Briggs, Environmental Administrator
    - Angela Avery, Operations Management Consultant Manager
    - Eberhard Roeder, Professional Engineer
    - Elke Ursin, Environmental Health Program Consultant
  - Via teleconference:
    - Marcelo Blanco, Environmental Health Program Consultant
    - Kim Duffek, Environmental Health Program Consultant
    - Bart Harriss, Environmental Manager
1. **Introductions** – Nine out of ten groups were present, representing a quorum. The Restaurant Industry was not represented. Chairman Tappan called the meeting to order at 9:35 a.m. The agenda was outlined, introductions were made, and some housekeeping issues were discussed.

Elke Ursin presented an update to the committee members. For the State University System, John Schert was reappointed as the primary, and Dr. Daniel Meerooff replaced Dr. John Dryden as the alternate representative. For the consumer group, the State Surgeon General reappointed Bill Melton as the primary, and Robert Washam replaced Eanix Poole as the alternate representative. For the local government group, the State Surgeon General appointed Christopher Pettit who replaced David Richardson as the primary, and Mayor Matt Surrency who replaced Nancy Gallinaro as the alternate representative.

At a previous meeting, there was the question of what constitutes a quorum. Elke Ursin brought this up for discussion as RRAC has no bylaws, and there is a need to record formally a group definition. The committee discussed two basic options. One was that a quorum would be more than half of the current voting member groups present, which is the present interpretation where 6 of 10 groups are required to be present. The negative view on this option was that some groups have historically not been involved with the committee and this could pose a limitation when trying to make a motion. The other option discussed was to go a hard number.

**Motion by Craig Diamond and seconded by Quentin Beitel, for RRAC to define a quorum to require one more than half of the current voting members present.** RRAC amended the motion to define a quorum as five voting members, Quentin Beitel withdrew his second, and Bill Melton replaced Quentin Beitel with a second of the motion. When called to a vote, six were in favor, with two opposed (Quentin Beitel and Clay Tappan). Discussion continued and RRAC amended the amended motion to define a quorum as half of the groups with identified representatives, Craig Diamond and Bill Melton accepted the friendly amendment. When Clay Tappan called the question and called for a vote on the amendment, seven were in favor, with one opposed (Quentin Beitel), and the motion carried but not unanimously.

2. **Review of previous meeting minutes** – The RRAC reviewed the minutes of the August 29, 2013; September 11, 2013; and October 22, 2013 meetings.

**Motion by Craig Diamond and seconded by Quentin Beitel, for the RRAC to approve the minutes of the August 29, 2013; September 11, 2013; and October 22, 2013 meetings as submitted.** All were in favor, none opposed, and the motion passed unanimously.

3. **Nitrogen Study Update** – Elke Ursin presented an update on the study regarding the project timeline extension and the current project status. On February 1, 2014, the Department submitted a legislative progress report outlining the cash and budget authority needed for the project ($650,000 for fiscal year 2014-2015) and provided information regarding the one year no cost contract extension request and RRAC’s support of this request during the previous meeting. If legislatively authorized, DOH would extend the contract to continue into fiscal year 2015-2016, subject to funding. Clay Tappan asked what the timeline on this would be and Gerald Briggs said that the budget and the budget implementation bill would address this. Nanci Cornwell with
Representative Hays office asked for a list of the tested systems, the names, and the addresses of the test sites. Gerald Briggs said that we could provide that information but that we had submitted information regarding the systems by county previously. Nanci Cornwell said that they needed some additional information to back up the data. Elke Ursin said that historically the website does not have the sampling results due to the potential for someone to take the data out of context as the sampling and quality control is ongoing. Clay Tappan said that early on in the project the RRAC decided that the sampling would not focus on individual proprietary systems but instead look at the process. He said that a bunch of different processes were bench-scale tested at the test center. Nanci Cornwell asked for that a meeting be set up with DOH to discuss this further to understand better the data. Elke Ursin provided an update on the spending to date. As of February 2014, the provider has invoiced $350,000 for this fiscal year. Gerald Briggs stated that the plan is to spend the entirety of the balance this fiscal year and that DOH does not plan to carry over any funds. Clay Tappan said that there appears to be enough funding to carry the project through this fiscal year, ending June 30, 2014, but he wanted to know what happens if the next part of the funding does not come through. Quentin Beitel added clarification that the funding provided for the project is still under the contract amount of $5,000,000, and that what DOH is requesting is cash and budget authority to get to the final contract amount.

Elke Ursin provided an update on the fieldwork. Hazen and Sawyer installed the last two experimental field systems at the end of 2013. Hazen and Sawyer installed one tank-based system in Wakulla County and replaced the system sampled as the first test site. Hazen and Sawyer installed the last system in Marion County and was a drainfield treatment system. Damann Anderson provided some details on this system. Hazen and Sawyer installed a liner on the ground and a lignocellulosic material was put on top of that for a carbon source, overlaid natural sand, and installed a regular drainfield, which is pressurized to evenly distribute the effluent over the drainfield. All seven sites are installed and are currently monitored. Out of eight total sample events per site, one in Wakulla has had eight sample events, one in Hillsborough has had seven sample events, three in Seminole have had three sample events, and the last two new ones (Wakulla and Marion) have each had one sample event. Damann Anderson stated that in Seminole County one was sampled right after Thanksgiving when there were four or five extra people staying at the house, and another site was sampled right after a Superbowl party that had seventy to eighty guests. For the field sampling of existing conventional systems to see how nitrogen moves through the soil, all the sample events have been completed for the four sites evaluated. The project team will use the results to help verify and calibrate the modeling component of the project. Anthony Gaudio asked why the Nitrex system was converted and Damann Anderson said that the homeowner was not happy with the system and had the option to accept the system or have it removed at the end of the sampling. Instead of completely removing the system, the homeowner was willing to accept the redesigned passive system instead. Eberhard Roeder provided a clarification that the homeowners concerns were not with the Nitrex system itself. Damann Anderson agreed and said that the system performed very well, with over 90% of the total nitrogen removed, but that it was a little more complicated than what the homeowner wanted.

Elke Ursin provided an update on the soil model development. One of the tasks was to create a simple soil tool that would show estimated nitrogen movement based on different conditions. This task is mostly complete. Some of the conditions for which the tool will provide nitrogen concentration estimates include the drainfield configuration (bed vs. trench), the distribution of loading (equal vs. unequal), the soil texture, water table depth, and the input concentration of nitrogen. The project team developed a complex soil model that performs the calculations to come up with the estimates provided in the simple soil tool. An aquifer model that is combined with the complex soil model is 50% completed. This aquifer model provides an idea of what happens to the
nitrogen when it enters groundwater. Eberhard Roeder said that this stage of the modeling shows that the models are working and the next stage is to match that with data to make sure the resulting estimates are a good approximation.

Nanci Cornwell asked for clarification on the project timeline and Clay Tappan said that a one-year extension is requested which has good justification based on the funding gaps in the project. Nanci Cornwell said that Senator Hays is looking for more detail. Tom Joos with the DOH Legislative Planning office said that a call is set up for Friday at 1:30 with Representative Nelson and Senator Hays to go over this. Craig Diamond said that DOH has the raw data from the sample events, but Hazen and Sawyer has not performed any substantive statistical analysis at this time because collection of the data is ongoing.

Elke Ursin said that the Soil Science Society of America’s Onsite Wastewater Conference has accepted a seven-part joint presentation/paper session on the nitrogen study with DOH, Hazen and Sawyer, the Colorado School of Mines, the University of Florida, and several other privately owned companies that have contributed to the research. The national/international conference is April 7-8, in Albuquerque, New Mexico.

4. Updates on Other Projects – Elke Ursin gave an update on the Florida State Wastewater Inventory Project. In April of 2013, DOH requested CDC Disaster Preparedness Funds to continue the wastewater inventory and collect information on drinking water source as well. She found out yesterday that the CDC has approved this grant with the condition that DOH spends the funds by the end of June of this year. She said that staff members are mobilizing to work on this and DOH has requested funds for next fiscal year to continue the project. The thought is to hire people proficient in SQL and GIS through a state term contract. Elke Ursin said that Nicole Pritchard, a Masters in Public Health intern, has been working on the procedure on how to get the data. The thought is to start with the Department of Health offices within the counties and work from there. DOH has met with DEP about this and DEP is willing to help, as well as DBPR and DACS. There is a lot of collaboration going on. Another thing that will be completed by the end of this year is a map-based web application where anyone can look for a property, see whether it is known to be on sewer/septic or estimated to be on sewer/septic, and provide updates to the data. DOH will provide RRAC with updates on the project.

5. Other Business – Paul Davis said that he is retiring in two days and wanted to thank everyone. He said that he appreciates the work Hazen and Sawyer is doing in pushing the technology forward and making the most use out of the one pump limitation for the passive systems. RRAC thanked Paul Davis for his historic involvement with the committee.

6. Public Comment – The public commented throughout the meeting.

7. Closing Comments, Next Meeting, and Adjournment – Elke Ursin said that the RRAC members and alternates would get a web-based survey after the meeting so that they can provide feedback on the meeting and have an opportunity to comment on potential process improvements. The next RRAC meeting date will be determined in the future. Bill Melton made a motion to adjourn, seconded by Quentin Beitel. The meeting adjourned at 10:51 a.m.