

# 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

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Final Minutes of the Web Conference Held on December 10, 2020

#### In attendance:

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

##### Attended members and alternates:

- Roxanne Groover (chair, member, Septic Tank Industry)
- Elke Ursin (alternate, Department of Health)
- Bob Himschoot (member, Home Building Industry)
- Craig Diamond (member, Environmental Interest Group)
- Bill Melton (vice chair, member, Consumer)
- John Schert (member, State University System)
- Daniel Meeroff (alternate, State University System)
- Mark Tumeo (member, Professional Engineer)
- Clay Tappan (alternate, Professional Engineer)
- Thomas Baker (alternate, Real Estate Profession)
- Kevin Cannon (member, Local government)

##### Absent members and alternates:

- Eric Rollings (member, Real Estate Profession)
- Geoff Luebkekmann (member, Restaurant Industry)

#### Department of Health (DOH), Onsite Sewage Program (OSP):

- Eb Roeder
- Audra Burchfield
- Debby Tipton
- Kim Duffek

#### Other attendees:

- Kevin Coyne (Florida Department of Environmental Protection - DEP)
- Sara Davis (DEP)
- Carolin Ciarlariello (DEP)

1. **Introductions** – Nine out of ten groups were present, representing a quorum. The meeting started at 1:30 pm. The agenda was presented, introductions were made, and some housekeeping issues were discussed.
2. **Review of previous meeting minutes – Vice Chair Bill Melton** called to review the RRAC meeting minutes of the December 10, 2020 meeting.

**Motion by Dr. Mark Tumeo and seconded by Mr. Craig Diamond for the RRAC to approve the minutes of the December 10, 2020 meeting with no changes. All were in favor, none opposed, and the motion passed unanimously.**

3. **Old Business and Research Program News – Xueqing Gao** went over the action items from the last meeting and provided an update on program news:
  - a. The OSP staff contacted Dr. Casey Schmidt and Dr. Mark Clark with the University of Florida/Institute of Food and Agricultural Sciences (IFAS) for questions regarding the suitability of different tree species for lignocellulose

media. This was an issue raised by Commissioner Cannon during the August 2020 meeting.

Dr. Schmidt and Dr. Clark are researchers who designed and constructed a media reactor downstream of a nursery – the Holly Factory Nursery located in the City of Alachua. This was a Santa Fe River agriculture best management practices for the Santa Fe River Basin Management Action plan. The system was built in 2009. The system is still running and IFAS is still collecting data from the system. The data collected in 2020 showed that, after a decade, the system is still removing more than 90% of the nitrogen in the stormwater from the nursery.

The media used for the bioreactor is pine mulch, which is similar to the lignocellulose media used in the nitrogen-reducing system (System B-HS5) that was built during the Florida Onsite Sewage Nitrogen Reduction Strategy (FOSNRS) study. This system started to show a significant degree of decay during the FOSNRS system continued monitoring project. The media used in B-HS5 is yellow pine mulch. A concern raised about the media was that the soft wood pine substance may not be decay-resistant and therefore, a more decay-resistant wood substance may be longer lasting than pine materials. Xueqing mentioned that the IFAS system, which uses a similar pine substance, was still functioning properly. Xueqing also mentioned that, based on suggestions from Hazen and Sawyer, the consultant firm that built the FOSNRS systems including B-HS5, it is preferable that decay-resistant tree species such as redwood, cedar, and cypress are not used as the treatment media. They can be too decomposition-resistant to provide sufficient organic carbon to denitrification bacteria.

**Commissioner Cannon** commented that one of the options to elongate the media system's life expectancy would be to increase the size of the media bed and use decay-resistant wood so that the frequency of media replacement can be reduced.

**Xueqing** mentioned that the FOSNRS study constructed two in-tank systems that have similar structure and use the same pine substance. One uses gravity flow (system B-HS4) and the other one is lift-dosed (system B-HS5). Significant media decay showed in the system with lift-dosing, but not in the system with gravity flow. The OSP staff plans to replace the media in B-HS5 and examine possible factors that facilitate the decay of the media.

- b. During the August 2020 RRAC meeting, the OSP staff presented some preliminary data analysis results regarding the effect of an onsite sewage treatment and disposal system (OSTDS) removal project carried out by City of Cape Coral on regional water quality conditions. Mr. Himschoot suggested that OSP staff contact Lee County to get more information about the OSTDS removal project.

The OSP staff contacted Mr. Roland Ottolini from the Lee County Natural Resources for information regarding the Cape Coral Utility Extension Project for the Southwest 6 & 7 area and set up a conference call with Cape Coral on December 18, 2020.

Mr. Tappan also suggested during the August RRAC meeting to discuss with the city about the effect of the Cape Coral Borrow Pit Dewatering project on the local hydrology to understand whether a possible change of local hydrology might have impacted water quality conditions. Xueqing mentioned that this would be one of the discussion topics for the meeting with the city on December 18, 2020.

- c. Mr. Ed Barranco, the section administrator for the OSP will retire by the end of 2020 after work with the Department of Health for over 36 years.
- d. Dr. Eb Roeder had been appointed as the new section administrator for the OSP.
- e. The RRAC memberships for members from the following groups will expire by January 31, 2021:
  - i. Florida Department of Health
  - ii. Septic Tank Industry
  - iii. Environmental Interest Group
  - iv. Restaurant Industry

The committee discussed whether the expired memberships should be extended/reappointed.

**Vice Chair Melton** suggested that all RRAC members whose RRAC memberships will expire get extended for the next six months.

**Mr. Himschoot** made vice chair Melton's suggestion into a motion, which was seconded by the **Commissioner Cannon**.

**Mr. Diamond** supports the motion but had a question whether we have the authority to extend the membership.

**Xueqing** mentioned that, before July 1, 2021, the RRAC will still legally exist. The expired memberships could be reappointed following the formal procedure. In addition, the OSP expected to seek comments from the RRAC members on several research projects before July 1, 2021.

**Chair Groover** suggested that all those who wish to continue their RRAC memberships can send their resumes and applications to Xueqing immediately to get reappointed if the DOH legal group has no objection. If not, the committee members whose membership will expire can just come in as usual for the RRAC meetings for a short period of time.

**Dr. Tumeo** suggested that, in many cases, when a committee membership expires, the member can still hold the position until the position is filled. Dr. Tumeo suggested Xueqing check with the DOH legal group whether this is also feasible for RRAC.

**Mr. Craig Diamond** asked whether DEP had considered to have a committee even if it is not mandated in the statute as RRAC. He commented that there is nothing in the statute that prevents them from having an advisory committee at their own discretion.

**Xueqing** mentioned that Dr. Roeder would give an update on the status of the program transfer during this meeting and may discuss this issue.

**Ms. Elke Ursin** mentioned a message from Dr. Dan Meeroff in the meeting chat box whether the motion was to go through the reapproval process. Ms. Ursin suggested reading the motion back to the committee.

**Mr. Himschoot** indicated that the motion he originally proposed was to check with the DOH legal group whether the expired membership can be extended for the next six months. Allowing expired members to stay on the committee before the position is filled was just a discussion and not part of the motion.

**Dr. Meeroff** indicated that he would prefer that the expired memberships be reappointed.

**Vice Chair Melton** asked whether Mr. Himschoot would like to restate the motion.

**Mr. Himschoot** stated that the motion was to extend the expired RRAC memberships until the dissolution of RRAC on July 1, 2021.

**Commissioner Cannon** suggest to re-word the motion as to extend/reappoint the expired RRAC memberships until the dissolution of RRAC on July 1, 2021.

**Mr. Himschoot** accepted the amendment.

**Motion by Mr. Himschoot and seconded by Commissioner Cannon to check with the DOH legal counsel whether the expired membership can be extended/reappointed until the dissolution of RRAC on July 1, 2021. All were in favor, none opposed, and the motion passed unanimously.**

- f. Leon County received \$1.5 million from DEP in 2017 to upgrade about 100 existing conventional OSTDS in the Wakulla Spring Priority Focus Area to passive nitrogen-reducing systems. DEP will install monitoring equipment into eight of these systems and collect data from four of these systems, including two in-ground nitrogen-reducing biofilter (INRB) without liner and two INRB with liner. The OSP will participate in the monitoring and monitor two INRB without liner using the funding from the federal Multipurpose Grant.
- g. OSP was working with Leon County to prepare a memorandum of understanding to allow the county to install two INRBs with liner before the revised the rule 64E-6.009(7), F.A.C that includes the specifications for the INRB with liner becomes effective.
- h. Alachua County is planning a development project in Flint Rock to build 90 new homes (one acre per lot). The county requires that these homes be served by nitrogen-reducing OSTDS because they are located in a springshed where Karst features are prominent and conduit flow is known to exist. The county is now applying for a grant to monitor the performance of some of these systems and requested technical support from OSP.

**Chair Groover** asked whether the Department of Health saw a possible conflict of interest with all the studies focusing only on INRBs without including the other proprietary products available in Florida. Her concern was that, in the past, the OSP research projects had been open to all the available options in the state. But in recent years, it appeared that the Department of Health, maybe in conjunction with DEP, through these research projects, almost recommends what type of systems should be used in the state, which should be avoided.

**Dr. Eb Roeder** answered that the reason why the OSP participated in Leon County and Alachua County project was because these counties sought technical support from the OSP. Participating in these projects allows the OSP research program to know the trends for OSTDS research in the state. It was not because OSP favored certain technology over the others.

**Chair Groover** stated that she understood that INRB systems do not need operating permits and maintenance entities like the other proprietary products. She had no objection to conducting research on INRB systems. She just did not want to give people the perception that the state was recommending through RRAC certain systems over the other systems.

**Xueqing** mentioned the performance of the proprietary products is evaluated through innovative system testing. The OSP has been doing that. The OSP also drafted a grant application proposal to evaluate the performance of aerobic treatment units (ATUs) and performance-based treatment system (PBTS) that meet the NSF International's (NSF)'s standard 245. Studying the performance of proprietary products is being considered by the program.

- i. Mr. Tom Baker asked about the impact of overusing antibacterial soap on the functions of septic systems. **Xueqing** presented the following findings obtained through some internet and literature searches:
  - i. The Center of Disease Control (CDC) emphasizes the importance of handwashing to protect health.
  - ii. CDC cited studies to show that handwashing with plain soap without antibacterial constituents can remove bacteria effectively.
  - iii. The US Food and Drug Administration (FDA) indicated that there was not enough scientific evidence that over-the-counter (OTC) antibacterial soaps are better at preventing illness than washing hands with plain soap and water. In addition, the wide use of antibacterial soap products over a long time raised concerns of potential negative effects on human health.
  - iv. On September 6, 2016, FDA issued a final rule establishing that 19 antibacterial ingredients commonly used in OTC consumer antiseptic products intended for use with water are not generally recognized as safe and effective (GRAS/GRAE). The rule became effective on September 6, 2017. Any unapproved OTC antibacterial wash products containing the 19 ingredients are subject to regulatory action.

When the rule became effective, FDA gave three ingredients, including benzalkonium chloride, benzethonium chloride and chloroxyleneol more time to submit data to show they are GRAS/GRAE.

- v. Benzalkonium chloride and benzethonium chloride are quaternary ammonium compounds (QAC) most extensively used as ingredients in biocides, disinfectants, sanitizers, antimicrobials and cleaners. Annual production of sanitizing products containing these constituents amounts to 100 million pounds in the United States.
- vi. Some studies were cited to suggest QAC can impact wastewater treatment. For example, Alysol (one type of QAC) could destroy the bacteria community in a domestic septic tank at a concentration of 5.0 mg/L (equivalent to dumping 5 gallons of Alyso into a 1000-gallon septic tank). Bacterial communities recovered about 48 hours after the Alysol dumping. QACs do not always stay in the water column. Studies show that QAC absorbed to suspended particle within minutes in the wastewater and up to 86% settle to the sludge in 24 hours. QACs inhibit active sludge at 10 – 40 mg/L level for wastewater treatment plants. Average influent QAC concentrations for wastewater plants were about 300 µg/L, which does not usually cause harmful effects on wastewater treatment bacteria communities.
- vii. It was found that the sales of disinfectant wipes in the United States were 146% higher in 2020 than the same period in 2019. If this increase in sales is reflected in the amount of

antibacterial soaps that people use during the pandemic, the concentration of QAC in wastewater discharge may increase, but may still be lower than the concentration range that can cause significant damage to bacteria communities in septic systems.

**Dr. Meeroff** mentioned that the capacity of the wastewater treatment plants would play a very important role in determining the impact of the antibacterial agents on the bacteria community. He suggested that he could do a quick study with his anaerobic digestion equipment in his lab to document any microbial inhibition by QAC.

**Commissioner Cannon** mentioned that Winter Springs noticed some problems with the city's sewage plant. The problem was traced back to a high school that sanitized the floor of the classrooms. He wanted to know whether the impact of floor sanitization in schools and hospitals had been addressed through studies.

**Xueqing** stated that he hadn't seen any studies that address this issue. He will share any studies on this issue when collecting papers on the impact of increased use of sanitizer on septic systems function.

#### 4. Update on status of OSP program transfer to DEP.

**Dr. Eb Roeder** started by answering Mr. Diamond's question whether there were discussions on having an advisory committee similar to RRAC at DEP. Dr. Roeder mentioned that he was not aware of any discussions of this nature.

He then provided some recaps on the OSP program transfer, summarizing the program transfer requirement from the Senate Bill 712 (now Clean Waterway's Act [laws.flrules.org/2020/150](https://www.flrules.org/Laws-Rules.nsf/00000000000000000000000000000000?open&document=2020_150)) and several reports and interagency agreement required by the law to be completed before the transfer date. He provided the web link to the report due by July 1, 2020 ([www.floridahealth.gov/environmental-health/onsite-sewage/ documents/onsite-sewage-program-report-SB712.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/documents/onsite-sewage-program-report-SB712.pdf)).

Dr. Roeder indicated that two OSP committees, including the Technical Review and Advisory Panel (TRAP) and RRAC, were repealed. The Variance Committee, however, will stay. A 10-member temporary OSTDS technical advisory committee will be created under DEP. The committee will be activated on August 1, 2021 and expire on August 15, 2022. This advisory committee will facilitate introducing of enhanced nutrient-reducing OSTDS into the Florida market and recommend setback distances from OSTDS to surface water, groundwater, wells, etc.

Onsite sewage permitting will be done by DEP through an interagency agreement with the DOH County Health Department (CHD) for at least five years. The central office functions to be transferred to DEP include contractor licensing, continued education, and contractor enforcement. All transfers will happen on July 1, 2021.

The amended section 381.0101, Florida Statutes (FS) removes OSTDS certification under the Certified Environmental Health Profession (CEHP) program, which is a requirement for DOH staff to work in the OSP and private site evaluators to serve the general public. This raised a question whether the OSTDS CEHP program can remain even if it is not mandated anymore or it will completely go away. The conclusion has not been reached yet.

Dr. Roeder also introduced the second report, which was due by December 31, 2020. This report includes recommendations from both DOH and DEP regarding all aspects of the OSP transfer and the continuation of permitting by CHDs under the direction of DEP through the interagency

agreement. DOH contracted with the Florida Conflict Resolution Consortium (FCRC) Consensus Center at the Florida State University to facilitate report preparation.

The FCRC Consensus Center first interviewed staff from both DOH and DEP to get some initial assessments and identify key issues. Six meetings were then scheduled between the two agencies to discuss these key issues and establish practical scenarios and discuss how to address them. Several other meetings were also scheduled to discuss other program transfer details and for staff from both agencies to understand how the program will be carried out under DEP. A draft report that outlines the future structure of the program had been prepared and is going through management review. Multiple scenarios for the program structure were proposed in the draft report. It will become clearer in the next several weeks what the final recommendation will be for the program structure.

One issue discussed during the report preparation was the funding of the permitting program. Currently, the permittees are either funded locally or funded by the state. It was recommended that the mixed funding mechanism be continued until a new way of funding is established. Under the mixed funding mechanism, DEP has access to the permittees and resources needed to provide direction of the OSTDS program. DOH CHDs will continue to have access to permittees and resources for providing environmental health services in general. Depending on the CHDs, environmental health staff may need to handle multiple program functions, which may make the staff transfer complicated.

Another issue being discussed was that the OSP will continue to provide services to CHDs similar to what the program has been doing. The permanent program structure will be established during the 5-year interagency agreement period.

Dr. Roeder mentioned that, while the program office staff and function would be transferred to DEP, the Environmental Health Database and its successor will remain at DOH. Both DEP and DOH program staff will have access to the database.

A training program similar to the current OSTDS CEHP program will be developed and be available to DEP and DOH staff and private site evaluators. Details are still being worked out on the training program.

The draft report includes four scenarios regarding how OSTDS work can be done at CHDs. A currently favored scenario is for the employees currently performing OSTDS functions at CHDs remain as DOH employees, but with delegation from DEP to perform the OSTDS functions after the transfer. These employees will generally remain at their current locations and perform their current functions. Their OSTDS function will be directed by DEP after the program transfer.

**Ms. Ursin** mentioned the \$5 surcharge from every new OSTDS construction that is currently collected by the OSP for research and training purposes. She wants to know where the money will go after the program transfer.

**Dr. Roeder** stated that the fee will become a DEP fee for conducting research projects because the nature of the transfer is a Type II transfer. The repair surcharge that has been used to fund the training center will also be moved to DEP.

**Chair Groover** asked whether the research fund transferred to DEP will fund research in general or if there are specifications that the fund should be used to fund research on OSTDS. She wanted to know whether RRAC can make efforts to ensure that funding will be dedicated for OSTDS research

in a memorandum of understanding or something that can be discussed during the legislative sessions.

**Dr. Roeder** stated that since the money will be transferred to the DEP OSTDS program, the money will be used for the OSTDS research. But it has not been discussed in detail regarding how the research funding will be implemented, in particular, how the research projects will be picked without the RRAC.

**Mr. Himschoot** asked what a building contractor should do to request a permit to construct a septic system after the program transfer.

**Dr. Roeder** stated that the statutory language regarding how to issue an OSTDS construction permit has not been changed except that DEP will be in charge of the permitting. The draft recommendation report ensures that, after July 1, 2021, there will be staff at CHDs issuing permits. Conceptually, it will be done the same way as it is being done now depending on the scenario that will be chosen. In some scenarios, the permittees will be DEP staff and may have different offices while in the other scenarios the current permittees will remain at the same locations and perform their OSTDS function as they are doing now. It would be important to think through where this may break down after the program transfer.

**Mr. Himschoot** raised a concern that with applications for more than 300 new construction permits and 60 repair permits each month in his county, if the transfer is not smooth, a chaotic situation may appear with the permit applications and site inspections. Solid protocols need to be developed prior to the program transfer.

**Commissioner Cannon** stated that, based on current data, there are 900 to 1000 people moving into Florida every day. The program transfer needs to be seamless considering the dramatic increase of population in the state. Making a seamless program transfer should be considered a high priority task.

**5. Draft request-for-quote document for evaluating the OSTDS impacts on regional water quality conditions – Xueqing** provided a summary of the scope of work:

- a. The project was jointly proposed by Dr. Roeder and Dr. Meeroff. The original goal was to evaluate the correlations between OSTDS, water quality, and human health effect. The project was ranked by RRAC in December 2017 as one of the five high priority research projects. The original goal was modified to be more focused on evaluating OSTDS impact on regional water quality conditions through analyzing the change of the water quality conditions before and after a wastewater project that significantly changes the distribution of OSTDS.
- b. The scope of work for the research project includes:
  - i. Identify an area with significant change of OSTDS distribution (e.g. a septic to sewer conversion project).
  - ii. Identify waterbody/waterbodies impacted by the change of OSTDS distribution.
  - iii. Examine the change of water quality conditions before and after the OSTDS distribution change.
  - iv. Evaluate the relationship between the change of OSTDS distribution and the change of water quality condition.
  - v. Analyze the influence from confounding factors, such as weather conditions, other local water quality projects, etc., on this relationship.
  - vi. Discuss the OSTDS impact on the regional water quality condition.



**Vice Chair Melton** asked why we did not specify the project and the study area that meet our project selection criteria.

**Xueqing** mentioned that the similar question was also asked by Chair Groover and Mr. Diamond through emails. Xueqing explained that the reason to leave the project and study area open was because the OSP does not know all the studies and projects and the data related to these studies and projects. Therefore, the OSP does not want to limit the study area and projects to areas that the OSP has knowledge about. Instead, we set up the criteria to select the project and study areas to have a reasonably large scale of OSTDS change for the environmental impact to be significant and long-term water quality data before and after the OSTDS change to allow us to evaluate the impact from the OSTDS change.

**Commissioner Cannon** stated that if he can find the kind of projects that meet our needs, he will be happy to share the information with the group.

- c. Interested providers should submit:
  - i. Resume or curriculum vita of all individuals to participate in the project, showing experience in OSTDS, environmental health, geographic information system and statistical analyses, and report preparation.
  - ii. A draft scope of work showing the study approach, OSTDS project areas and related information, impacted waterbody/waterbodies, sufficient data for water quality analyses before and after the OSTDS project, confounding factors analyses, and approach to determine the OSTDS regional water quality impact.
  - iii. Cost and timeframe for the project (OSP will provide up to \$20,000 for the project and expect that the project be finished by June 30, 2021).
- d. Candidates will be selected based on the following criteria:
  - i. Candidate's experience in OSTDS evaluation (including environmental impact analyses), GIS analyses and statistical analyses.
  - ii. OSTDS case identification (OSTDS project, OSTDS project start and ending dates, the number of OSTDS converted, age and condition of removed OSTDS, impacted waterbody, hydraulic relationship between the project area and impacted waterbody, number of water quality stations with long-term water quality data, control water quality stations, weather data, information regarding other water quality related projects).
  - iii. Water quality parameters included in the analyses (must have nitrogen, other parameters preferred include phosphorus and pathogens).
  - iv. Confounding factor analyses: Approach for identifying the confounding factors and evaluating the influence of confounding factors. List of confounding factors included.
  - v. Data analysis: Approach clearly defined.
  - vi. Costs to conduct the project.

**Vice Chair Melton** indicated that, for this project to be meaningful, the project selection is critical. The data analyses rely heavily on the project that is properly selected.

**Xueqing** agreed with vice chair Melton. He stated that it is why the interested providers are required to submit an approach document for the project. Project identification is a critical part of the approach document.

**Vice Chair Melton** asked whether there will be a proposal prescreening process.

**Xueqing** responded that whether a proposal screening process will be conducted depends on the number of proposals that the OSP will receive. If a large number of proposals will be received, a prescreening will be done. Xueqing also asked the RRAC members to provide suggestions on

where the OSP should advertise the request-for-quote document so that more proposals can be attracted.

**Mr. Himschoot** raised concerns about the water quality impacts from sources other than OSTDS. He mentioned that, while Cape Coral Utility Expansion Project converted a large number of OSTDS to sewer since 1990s, the impact from the Lake Okeechobee discharges has a great impact on the water quality of the Caloosahatchee River. He mentioned that nobody studied the water quality of the discharge from the wastewater facilities located in the upstream area of the Caloosahatchee River.

Mr. Himschoot also stated that there are 101 wastewater facilities located in the Indian River Lagoon watershed that treat 106 billion gallons of wastewater. Much of these wastewater discharges enter into the lagoon estuaries, but less than 2% of these facilities meet the advanced wastewater treatment standard. When analyzing the water quality impacts from different sources, the impact from these wastewater facilities should not be ignored. In order to do that, it is critical to collect information about the number of wastewater facilities, their treatment standards, and the portion of the wastewater discharged into receiving waterbodies. This will help determine who is the biggest culprit for the water quality issues.

**Xueqing** agreed with Mr. Himschoot that understanding the impacts from other pollutant sources is an important part of the evaluation of OSTDS water quality impact. He mentioned that it is exactly why analyzing the impact from confounding factors is included as one of the critical aspects of the OSTDS environmental impact analyses.

- e. The following tasks need to be completed for the project:
  - i. Task 1: Discuss with OSP staff to finalize and submit the approach document
  - ii. Task 2: Collect proposed data
  - iii. Task 3: Analyze collected data
  - iv. Task 4: Develop and present draft final report
  - v. Task 5: Final report

**Xueqing** thanked all the RRAC members who provided review comments on the request-for-quote document and indicate that any further comments on the document can be provided to OSP through emails by December 18, 2020.

**Vice Chair Melton** thanked the hard work and the great contribution from Ed Barranco to onsite system regulation.

**Xueqing** asked whether the committee will prepare an appreciation letter and, if yes, who will prepare the letter on behalf of the RRAC.

**Chair Groover** volunteered that she will prepare the letter. She will prepare a thank you card, share with all RRAC members for signature, and send it to Mr. Barranco.

**Mr. Himschoot** asked whether the RRAC needs to approve the request-for-quote document.

**Xueqing** mentioned that we can take the approach that RRAC members provide their comments to Xueqing no later than December 18, 2020, and he will incorporate the comments into the finalized document. Xueqing asked whether we should have another RRAC meeting to approve the document.

**Dr. Roeder** suggested that having another RRAC meeting to approve the document is certainly an option. But considering the upcoming holiday season, and the time required to solicit the quotes, review the proposal, select the provider, and issue purchase order, as well as the short period available to complete this project (the project needs to be finished by the end of June 2021), having another RRAC meeting to approve the document may not be feasible. In addition, because of the funding sum is relatively small, the chance of making a big mistake is small.

**Xueqing** suggested that he will collect and review all the comments from RRAC members. If he sees major comments that change the approach of the study, another RRAC meeting will be considered. Otherwise, all comments will be incorporated into the final request-for-quote document and start the solicitation. Xueqing stated that one major comment on the document is why we do not specify the project area. It has been explained during the meeting that OSP does not want to limit the project to project areas that the OSP has knowledge about. If RRAC members have no objection to the approach, the comment will be considered properly addressed.

**Vice Chair Melton** raised a concern that if multiple quotes are received that propose multiple project areas, selection of project would be complicated.

**Mr. Diamond** indicated that he did not have any issue with OSP staff selecting the provider. His concern was not about selecting the final quote from multiple quotes. He felt that it is not very likely we will get many quotes.

**Motion by Mr. Diamond and seconded by vice chair Melton, that if there will be no major comments that will cause the change of study approach, the OSP staff will incorporate all comments into the final request-for-quote document and start the quote solicitation. None opposed, and the motion passed.**

**Motion by Mr. Diamond and seconded by Commissioner Cannon, for the RRAC to adjourn at 3:40 p.m. None opposed, and the motion passed.**

The meeting adjourned at 3:40 pm.