

SMALL COMMUNITIES ENVIRONMENTAL INFRASTRUCTURE GROUP

March 1, 2010

MINUTES

Attendees: Steve Grossman and Ken Heigel, OWDA; Dave Douglas, USDA/RD; Randy Hunt and John Rauch, RCAP; Tim Leasure, ODOD; Karen Mancl, OSU; Lori Libby, Miami University - CPMRA; Dave Bornino and Brian Hall, Ohio EPA; Kaye Borchers, Choice One Engineering; Kurt Ericksen, TMACOG; and Mike Miller, OPWC.

Steve noted that he would be reporting for Jim Bonk, Stephen Porter and Dave Frantz, who were unable to attend the meeting today.

TRAINING COMMITTEE: Karen Mancl and Lori Libby - Curriculum and Randy Hunt - RCAP Training

Curriculum:

Water and Wastewater-

Karen reported that since the onsite sewage legislation is in limbo again until July 1, 2010, there is not much activity.

In December, OSU held a mound construction workshop for installers. Nine people attended.

At the beginning of February, OSU hosted the Ohio Water Quality and Waste Management Conference. The conference was entitled "Waste Energy in Rural Ohio" and approximately 60 people attended. The conference featured quite a few OSU researchers as well as researchers from China who are much further along with alternative energy. She was very pleased with results of the evaluations which included a high interest in the subject matter, as well as high interest in the future of waste energy in Ohio.

The 2011 conference is being planned now. The topic is "Wastewater Treatment at Cool Temperatures" and will feature some research that is currently being done at OSU regarding cold temperature impacts on treatment systems.

OSU is offering their annual Design School Thursday and Fridays, April 22, 23, 29 and 30 at the Molly Caren Agriculture Center near London, Ohio (brochure attached). Karen noted that she hopes there will be some revisions to the new state law by that time; however, the Design School will still be held whether there are revisions or not as people have already registered. Many counties require continuing education in this area.

Until legislation is known, Karen commented that it is not affordable for OSU to plan more than this.

Publications-

Karen reported that because OSU is not doing as much programming, they are doing more publications.

OSU has a new manual for “Septic Tank Soil Treatment Systems for Rural Ohio” which is available on their website at <http://setll.osu.edu>. She distributed a few copies to the group noting that OSU has been teaching out of this manual for the last 3 years at the Design School. They were waiting for the new legislation to pass to make it available to the public. Ohio Department of Health agreed with OSU that it was time to move forward with publishing and distribution.

A final draft of the “Wastewater Disinfection to Protect Public Health” publication is going to the editors.

“The Suitability for Ohio Soils for Treating Wastewater” book is out of print. She and Dr. Slater are currently going through every soil table in the book because there has been a lot of reclassification of soils. Ultimately, these tables will be moved in different directions (i.e. moving from suitable for mounds to leach fields), and names of soils and percentages will also be changing. Many of the soils are wetter than what they were when they were previously classified.

Karen reported that the “Sand Bioreactors for Wastewater Treatment” book is also being worked on. The reviewer’s commented that too much information was being stated in one book. As a result, they are working to split this book into two or three books; one for “Bioreactors for Onsite Systems”; another for “Bioreactors for Communities”; and one for “Bioreactors for High Strength Waste”. The new books will be re-titled in order to avoid limiting them to sand because there is a lot of other media available for bioreactors backed by research.

New Technology/Research

New Systems:

OSU’s endowment funds have made it possible for some investments to be made at the Soil Environment Technology Lab for new systems. A peat biofilter has been installed (one of the new media mentioned in the Bioreactor books) which features a tipping pan for distribution using a gravity-style dosing system. This process is very fascinating because you can take the lid off to watch it. The discharge from this system is released into a spray irrigation field, which has been upgraded with different types of freeze protection treatments, and is based on research from the OSU lab. For the freeze protection research, they put sprinklers in a freezer at 20 below zero and tried to break them. Different types of treatments for winterizing were used and the researchers were

shocked that they could not break one single sprinkler. The Master's thesis has been published for this research and journal articles are being written.

OSU has been operating a pilot plant with a layered media sand bioreactor for two-years at an Ohio food processors' turkey slaughter house. The plant is producing unbelievably beautiful effluent. Karen reported that the owners of this business are currently going through a permitting process in order to build a full-size facility to treat all the wastewater from their plant. She attended the public hearing for this in December and noted that the sand bioreactor design was developed at OSU.

Steve inquired regarding home septic systems. Given all the controversy that took place regarding the average cost of the system; now that there is \$3.5-\$4 million of stimulus money out in communities, he wondered if anyone is doing studies about what the average cost is for these systems.

Karen replied that a study was done and they were not able to find where systems would cost \$30,000.

Ken noted that he is not aware of tracking the average cost but thought it was a good idea.

Kurt commented that it depends partially upon the site conditions.

Karen added that it also depends on the size of the dwelling. It has to be standardized.

Steve noted that with the stimulus funds out now, there will be facilities built. Who would be responsible for tracking these funds and projects?

Karen responded that the Ohio Department of Health (ODH) would be responsible. ODH did a study, as mandated by law, approximately four years ago. The numbers were surprisingly low compared to the new systems that were being installed. When they are new, they are going to be the most expensive until people get used to installing them. Then the prices will start to go down. The prices are a lot lower than the rumors had placed them at.

Brian inquired if OSU has any guidance for mechanical systems; specifically for an operation. Karen stated that they did not.

Brian continued that OEPA is currently posting public notices for the general permit requirements rules. They are receiving comments from some of the local health departments stating that the permits that are now in place for general permits for home systems have requirements. When they are taking samples, there are problems with taking them due to the costs associated with the sampling.

Karen responded that when she was on sabbatical in 1999, she went to a community in northern Illinois that had required management of mechanical systems. They had a large

number of systems in this program and were required to have a maintenance contract. The maintainers also had to be certified by their companies. The local health department physically inspected every system every six months, collecting and testing the samples. Based on their effluent limits, which are not as strict as OEPA's, only 33% were in compliance. Sixty-seven percent were not in compliance even though they were paying for the inspections and tests, as well as the maintenance contract. She was very disappointed because she thought they had really figured it out. The findings have been published in a journal which is posted on OSU's website.

Brian noted that they will be renewing the permits next year.

Karen commented that the sand or other media bioreactor systems can meet OEPA's permit effluent requirements. That is why she wants to write a journal article specifically for home systems because the current one is for Ohio communities. Her hope is to produce a simple manual that would assist with tasks such as replacement of the mechanical system. Their current manual still has good information; however, it is 10 years old and they have more knowledge now.

Brian reported that ODH currently certifies certain treatment systems. ODH gets a list of treatment systems and will look for the least expensive one. Unfortunately, this does not have any bearing on repeatability in being able to meet the limits. ODH says that all the systems on the list will meet this treatment system. Ohio has approximately 4,000 permitted discharging home systems at this time.

RCAP Training

Randy distributed RCAP's training brochure for the next series of trainings (attached) and is available on their website at www.glracap.org/ohio/. RCAP is offering Asset Management, Budgeting and Rates training starting this month. This training is being offered for the first time in conjunction with CUPSS, US EPA's Check-Up Program for Small Systems. There will be two days of training beginning with Asset Management, followed by two days of CUPSS training with the option of taking one of the two days. The reason for this is the CUPSS training has to be done at a computer lab where there is limited seating. Some of RCAP's staff has spent extensive time assisting EPA in the beta test of this software.

John noted that the Asset Rating and Management course is a pre-requisite to CUPSS. As mentioned previously, many bugs had to be worked out utilizing a team of people from RCAP. He believes the system has been fully tested and is finally ready.

Steve inquired if Ohio is leading all the other States in using CUPSS.

John responded that he believed that to be the case. If Ohio is not leading, there might be someone out in RCAC that is trying to keep up with RCAP. US EPA came out with a memo to the RCAP team that was working on CUPSS thanking them for taking the lead. RCAP is promoting CUPSS as much as anyone else in the country. RCAC might be a

little ahead of RCAP because they have been working with Bill Jarocki on some of the sites; however, up until CUPSS, there was never really anything good for water that could be coupled with the Asset Management and Maintenance portion for water systems.

Randy noted that US EPA also printed a nice article in their national newsletter thanking RCAP for assisting them in order to get the system online. If anyone has questions regarding CUPSS, refer them to US EPA's website.

Karen stated that she will put the CUPSS website link on the OSU website (www.epa.gov/safewater/cupss/).

Steve asked Dave Bornino if OEPA is encouraging certain communities to go to the training.

Dave Bornino responded that they are trying to. Their District Coordinators are really the ones who see the systems that could really use the help. One of the incentives they always mention is that the community will receive an extra 5 points from OEPA just for attending the training. This goes towards some of the scoring on OEPA's project priority list. The greater the need is, the more points you get toward your project. This also increases the amount of loan money that can be received from OEPA.

Kurt inquired if they are trying to get plant operators to attend as well.

Dave Bornino responded that they are targeting the boards more.

John reported that they have had approximately 6 trainings where there has been a good representation of board members. The meetings are usually comprised of Village administrators, mayors, a few council members, as well as some operators. The communities that have had good board representation, such as Buckeye Lake, had their entire council there. Buckeye Lake's only exception was their former mayor who did not agree with the project. Buckeye Lake attended all the trainings and he believes they have signed up for CUPSS.

RCAP tracks everyone who attends the trainings. Therefore, if there is ever a question as to who attended (i.e. if a community is applying for an SRF loan and claims they deserve points), RCAP can verify their attendance and send the report over to OEPA very quickly.

John noted that RCAP has been working with CUPSS for approximately the last 3 years. They were supposed to start on it 2 years ago; however, US EPA just had too many issues with it. CUPSS was discussed a few years ago during trainings and people were anxious then to get started on it. Now that CUPSS is finally being offered, registration for these classes has been very good. The downside is that you can only work with so many people in the computer labs.

RCAP has a potential conference in August. For the infrastructure portion of the conference, they want to showcase some of what goes on with SCEIG. Hopefully within the next few months, the group will have time to come up with a creative way to show what SCEIG does. There will be three sections to the conference; one for infrastructure and finance, one for leadership and another for community development. The overall goal is to fill a need that is not being met with AWWA, WEF, Ohio Municipal League and Rural Water for small communities, while keeping the cost down. They plan to include meals with the conference costs. Senator Brown has committed to giving the keynote address, and they are working with Senator Voinovich's office to see if they can cover one of the lunch sessions.

Randy added that they are working on sponsorships to help with offsetting some of the costs. RCAP's goal is to make this an opportunity for people to access water and wastewater funding agencies, legislators and decision-makers, as well as providing information and resources that will be useful.

John offered to e-mail the group with a draft list of topics.

Kurt reported that TMACOG hosted an RCAP session the Saturday before last. Eighteen people representing 7 communities attended. With two exceptions, they were all elected officials with most of them being members of council. Overall, it was a very good mix of people, including some that were more experienced who shared very willingly. The Village of Helena attended, which is a town of 100 people that had no previous knowledge base.

The only unfortunate thing is that they did not get any plant operators to attend. Getting people to the sessions is still difficult. They can get word to elected officials, but it takes pulling out all the stops to get them there. If this is offered again next year, he and Tom might be interested in doing some kind of combined effort with the Northwest District. Kurt offered that TMACOG could prepare the brochures.

FINANCE COMMITTEE: Steve Grossman for Jim Bonk

There was no Finance committee meeting in February; therefore, there is nothing to report at this time.

Steve noted he would discuss the schedule for 2010 during the Outreach Efforts report.

DECENTRALIZED WASTEWATER WORK GROUP: Dave Douglas

The Decentralized group held a meeting on January 19. They discussed the proposed Community Training meeting that is to be held in either September or October. The site has not been determined as yet; however, they hope to secure something in the Zanesville/Cambridge area. Target communities will come from Ohio EPA District office enforcement lists, County Commissioners and OWDA's Unsewered Program communities list.

They are currently working on the final agenda to make it shorter than the agenda for the meeting that was held four years ago. The previous training was 9 a.m. to 3 p.m. including lunch. The goal is to condense the time down to approximately 3 hours between 9 a.m. to noon. A meeting is planned for April 7 to work out the details of the training.

Dave reported that they are also working on a number of different training and education projects. Work has begun on a number of Fact Sheets including three for the Amesville process; one for approved technologies from Ohio Department of Health; one for engineers to help with planning decentralized vs. centralized; and one to look at cluster system technologies.

Plans are also being made for booths at several upcoming conferences including the County Commissioners Association in the beginning of December 2010; another for WEF and OWEA on June 14, 2010; one for ORWA's annual meeting in May; and one for OTCO trainings for operators in March and August. They also plan to update the decentralized website this year; 2010 will be a very busy year!

Overall, the Decentralized group's goal is to stick with their mission of providing non-technical information and advice/education to build capacity/existing small systems. The idea is to make small unsewered systems affordable through a decentralized option; especially in cases where centralized options are much too costly.

Dave reported about one project in the works for West Farmington in Trumbull County which the group is very excited about. The reason they are excited about the project is because this will be the first for into the Northeast District area. Hopefully, they can receive approvals from OEPA's District office there in order to branch out into another area of Ohio. Funding is planned for this year and it looks promising because the District is looking favorably at the project!

Dave Bornino asked who they are working with.

Randy responded that Joyce from RCAP has been working with the District.

Karen mentioned that they have a moratorium on discharging systems there. A lot of people from Trumbull County will be interested in this project because they have interest on how to design systems that don't discharge.

John recalled that this project may have been initiated by the Northeast District office a while back. He received a call from West Farmington approximately two years ago.

