

NC Environmental Health Brief

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Edited by: Jennifer Stewart	

This newsletter is published to keep you updated on EH news and topics of interest. Suggestions are welcome

Introduction to the Newsletter

by Larry Michael

Moving from task to task and putting out the daily fires often leads to forgetting about the great things we accomplish for the citizens and visitors of North Carolina and may even cloud our vision of the future. Environmental health practice is extremely dynamic and resilient as we adjust to legislative changes, take on new threats (e.g. Zika virus), and use scarce resources to uphold our mission to protect the health of people and the environment.

With these thoughts in mind, we present the inaugural issue of NC Environmental Health Brief.

In this publication, you will learn about emerging issues, upcoming trainings, special announcements (e.g., laws and rules updates), our environmental health section staff, local

environmental health programs, and other topics of interest to environmental health.

Finally, safe drinking water, safe sewage disposal, and food safety are often cited at the top of any list of interventions that have increased life expectancy over 30 years since 1900. It's so easy to take all of the great work in environmental health for granted and I hope this helps us tell our story. Please contact us if you have

a suggestion or a news item to share. Thanks for reading!



Upcoming CIT Training

by EH Staff

Class dates and locations are set for CIT in 2016.

March 7-11 – General Module, DHHS offices, Raleigh

March 14-18 – Food Module, Holiday Inn, Raleigh

March 28-April 8 – Onsite water protection Module, Lake Wheeler Pole Barn, Raleigh

May 23-27 – General Module, Raleigh, (final location TBD)

June 6-17 – Onsite water protection Module, Lake Wheeler Pole Barn, Raleigh

June 27-July 1 – Food Module, DHHS offices, Raleigh

October 3-7 – General Module, DHHS offices, Raleigh

October 10-14 – Food Module, DHHS offices, Raleigh

October 17-28 – Onsite water protection Module, Lake Wheeler Pole Barn, Raleigh

Sign up online here: <http://>

ehs.ncpublichealth.com/oet/citreg.asp

Employee Spotlight: Cindy Callahan, Branch Head, Food Protection and Facilities

Please tell us about your experience in public/environmental health?

I started working as an environmental health technician in Macon County, Franklin, NC, in 1987. Clay Pennington authorized me in food, lodging, & institutions (FL&I) and on-site wastewater (OSWW) in 1989. At that time the childcare authorization was also included in FL&I. In Macon County we evenly divided the work inspecting food and lodging establishments and OSWW evaluations, including final inspections on septic systems one day a week. I enjoyed the OSWW program but preferred the FLI program eventually becoming the program specialist for the FLI program. In 2003, I left Macon County and accepted the State position as an environmental health regional specialist.

What is your best memory of being a regional specialist?

I have many good memories. It is really a great job to have had. I met and developed friendships with county environmental health specialists that will be long lasting.

What are your short term goals as branch head?

This is a big job and I plan to get a grasp on it. Organize the files in my office, work on the Branch website, respond to emails faster, finish all the required on-line training, form a workgroup and finalized the guidelines for shared use kitchens (multiple permits in one food establishment). Really, I wish I could do everything at once, but it's not possible.

What is at least one long term goal as branch head?

Adopt the 2017 FDA Food Code. With amendments, of course.

What do you like most about working out of the Raleigh office?

Working and getting to know my co-workers. I missed the office atmosphere when I was home based.

What do you like least about working out of the Raleigh office?

The traffic in Raleigh, especially on Six Forks Road.



Tell us about one of your hobbies and why you enjoy it? I'm a licensed Zumba instructor. If you've never tried it, you should. It's Latin dance and it's so much fun you don't realized you've been working out for an hour. Unfortunately with commuting and work, I've not had a lot of time for Zumba, but I'll manage to fit it in again soon.

Assessments of On-site System-derived Nutrients in a Watershed Scale

by Sushama Pradhan, Ph. D, Non-point Source Program Coordinator, OSWP Branch

Anthropogenic nutrient contribution is one of the most common reasons for surface water impairment in North Carolina. Basin management plans and Total Maximum Daily Loads (TMDLs) for nutrients are becoming more prevalent as a means of managing nutrient loading to surface waters. Due to the individual nature of on-site wastewater treatment systems

(OWTSs), their influence on surface water quality is relatively unknown, particularly their comprehensive effects on a watershed scale. Part of the reason for this uncertainty is the lack of field data collection within delineated effluent plumes to confirm OWTS contributions in typical Piedmont settings.

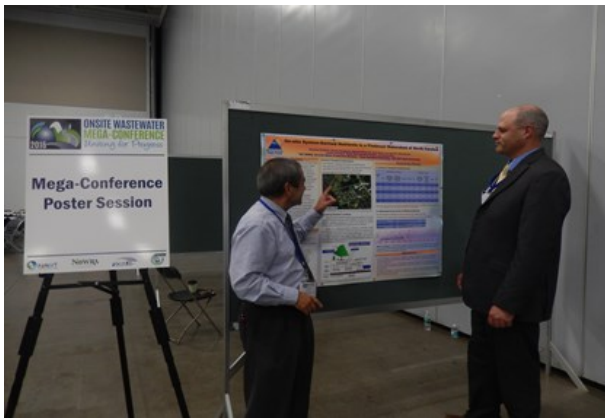
On-site wastewater treatment systems are the primary domestic wastewater treatment system for approximately 50% of North Carolina's population. It is almost impossible to obtain enough site-specific field data on measurement of pollutant loading from individual systems. Thus, the prevalent approach of quantifying pollutant loading is by using adapted watershed scale hydrologic models and carefully selected refined model inputs.

The On-site Water Protection Branch initiated a collaborative study with the Environmental Health Sciences Program at East Carolina University and Civil, Architectural and Environmental Engineering Program at North Carolina A & T State University. The project goals included studying OWTS-derived nutrient transport dynamics and to model nutrient loadings at watershed scale using the Soil and Water Assessment Tool (SWAT-Septic) model.

Accurately estimating OWTS-derived nutrients in both current and future development scenarios is a critical research need. The information collected in this project will assist governments with decisions regarding current and future wastewater treatment infrastructure strategies that can substantially reduce nutrient loads in affected watersheds. These include consideration of on-site system maintenance and monitoring strategies, more advanced (and costly) types of OWTSs, as well as potential sewer extensions.



PICTURE 1: Dr. Sushama Pradhan presented a poster entitled "Modeling on-site wastewater treatment systems for nutrient fate and transport in Lick Creek watershed" at the international SWAT conference in Purdue University, Indiana, October 2015. Dr. Pradhan is pictured here with Drs. Murlu Dhar Sing, Sanjay Kumar Srivastava and Er. Narendra Kumar Tiwari from India.



PICTURE 2: Engineer Ishwar Devkota and Regional Soil Scientist Tim Crissman discuss the Branch's poster presentation on "On-site system-derived nutrient in a Piedmont watershed of NC" at the National Onsite Water Recycling Association (NOWRA) Conference in Virginia Beach last November 2015.

Employee Spotlight: Phil Thompson Program Manager; Pools, Tattoos, and Special Programs

We interviewed the new branch head and here are his answers to some of our questions.

Please tell us about your experience in public/ environmental health?

I began my career in environmental health in 1990 with the Alamance County Health Department. I worked there for over 8 years and was authorized in all areas of our practice. In 1999, I became a Regional Environmental Health Specialist with the Pools, Tattoos and State Institutions Program serving 24 counties and dozens of state institutions in the Piedmont Region. On December 1, 2015, I began my duties as the Program Manager for the Pools, Tattoos and State Institutions Program following the retirement of Jim Hayes.

What is your best memory of being a regional inspector?

I really enjoyed all aspects of being a regional specialist. The inspections, authorizations, speaking at continuing education meetings and getting to see different parts of the state on a regular basis. I especially enjoyed inspecting prisons, the people there are really nice and make you feel right at home!

What are your short term goals as branch head?

My short term goals are to hire 2 regional specialists to fill our vacant positions, improve communications both within our program and with the branch and section leadership, and revise our CIT presentations.

What is at least one long term goal as branch head?

To provide more continuing education on pools and tattoos across the state.

What do you like most about working out of the Raleigh

office?

The ample free parking.

What do you like least about working out of the Raleigh office?

Rush hour traffic.

Tell us about one of your hobbies and why you enjoy it?

I enjoy playing golf, reading, and watching my daughter play volleyball and basketball for her high school.



Food Protection and Facilities Branch Awarded Grant from AFDO

By Jennifer Stewart, MS Food Defense Coordinator

Recently the Food Protection and Facilities Branch had the opportunity to apply for a grant through the Association of Food and Drug Officials (AFDO) in order to enhance implementation of the FDA Retail Program Standards - standard 4 quality assurance. After much work, the program was awarded the maximum grant amount of \$20,000.

This funding will allow the purchase of training equipment for all staff as well as new sets of interactive learning devices and software. These devices will allow the development of more interactive and hands on training programs. In addition to new equipment, this funding will also allow implementation of a pilot QA program with county staff that will be rolled out to the entire state after the trial period. Development of new training courses, materials, and worksheets are planned. Food protection regional staff members are very excited to have the opportunity to make more training options available to each county and bring North Carolina fully into compliance with standard 4. Stay tuned for updates on upcoming trainings that will be held and for opportunities to participate in beta testing new materials and methods over the coming year. If you have questions about this program please feel free to contact Melissa Ham (Melissa.ham@dhs.nc.gov). For more information about the FDA program standards visit: <http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/ProgramStandards/>

NC Childhood Lead Poisoning Prevention Program Builds Partnerships to Enhance Knowledge among Clinical and EH Professionals

By Neasha Graves and Megan Hoert Hughes, Environmental Health Educators, UNC Institute for the Environment

In the past five years, more than 36,000 children younger than 6 years old tested with blood lead levels at or above 5µg/dL, the level at which the Centers for Disease Control and Prevention recommend clinical and educational interventions to reduce lead exposures among children. The NC Childhood Lead Poisoning Prevention Program (CLPPP), housed in the NC DHHS Environmental Health Section, fostered partnerships and coordinated statewide and regional outreach activities last fall to prepare clinical and environmental health professionals with knowledge of emerging issues regarding lead exposure.

In partnership with NC CLPPP to coordinate outreach activities, UNC Chapel Hill Environmental Resource Program educators Megan Hoert Hughes and Neasha Graves conducted “lead talks” for nearly 200 environmental health specialists and health educators employed throughout the state. The presentations, given during regional education meetings coordinated by the NC Public Health Association environmental health districts and the NC CLPPP regional staff, highlighted information on emerging, nontraditional sources of lead in consumer products, the effects of lead on pregnant women and infants,

and recent state and federal policies implemented to minimize lead exposure among at-risk populations.

NC CLPPP staff also collaborated with the NC State Laboratory of Public Health to coordinate a statewide clinical lead training for over 100 healthcare providers across the state on October 22-23. Across the two days, the training, which was offered in-person and as a live webcast, featured research on sources and health effects of lead exposure, policies around testing and environmental investigations for small children, information on blood lead sample collection and reporting, and strategies and materials for educating families of small children. State Lab Hemachemistry Supervisor Kate Mason praised the multi-faceted training approach, “The North Carolina State Laboratory of Public health is pleased to have the opportunity to partner with NC CLPPP to provide the Clinical Blood Lead training. We feel the training’s combination of policy, clinical and educational resources for healthcare providers was imperative. HCPs have limited travel abilities and enormous workloads, and the ability to ask questions during the live webcast was an added bonus.”

For more information on lead outreach activities for professionals or community audiences in your county or region, contact Neasha Graves at neasha_graves@unc.edu or (919) 966-3746. Funding is provided, in part, by the Centers for Disease Control and Prevention (Grant 1UE1EH001276) for these training and outreach activities.

Online at <http://ehs.ncpublichealth.com/>

The North Carolina Environmental Health State-of-Practice Committee (NCEHSOP) is announcing the following workshops in 2016:

<http://www.ncehsop.org/>

APRIL 5-7, 2016

Food Establishment Plan Review

Holiday Inn Raleigh North-Midtown
2805 Highwoods Blvd.
Raleigh, NC 27604

\$125.00 registration fee (limited to 40 registrants!)

15.75 credit hours

APRIL 29, 2016

Evaluating Clay Mineralogy for On-Site Wastewater Systems

NC Cooperative Extension/Orange County Center
306-E Revere Rd.
Hillsborough, NC 27278

\$50.00 registration fee (limited to 30 registrants!)

6.25 credit hours

MAY 17-18, 2016

On-Site Wastewater: What You Always Wanted to Know But Were Afraid to Ask

Alamance Community College
1247 Jimmie Kerr Rd.

Room B202

Graham, NC 27253

\$99.00 registration fee

9 credit hours

AUGUST 3-4, 2016

1ST Annual Environmental Health Symposium

Co-Sponsored with Eastern AHEC

New Bern Convention Center

New Bern, NC

\$75.00 registration fee

Registration will begin in Spring 2016! Finalized

agenda will be released at that time!

NOVEMBER 9-10, 2016

Emergency Preparedness: Are You Ready for the Zombie Apocalypse?

Christmount Center

Conference Rooms A & B

222 Fern Way

Black Mountain, NC

\$115 registration fee (LUNCH IS INCLUDED!)

10 credit hours

15 rooms at the Christmount Christian Assembly are

blocked off for this event with a government rate of \$89/room)