

# TRAINING AND CERTIFICATION SCHEDULE

Information and registration can be found at [www.nawt.org/training](http://www.nawt.org/training)

## INSPECTOR TRAINING & CERTIFICATION:

### August 29-30, 2013 - Casa Grande, Arizona

Univ. Of AZ, Janine Lane at (928) 782-5882  
or [janinel@cals.arizona.edu](mailto:janinel@cals.arizona.edu)

### November 14-15, 2013 - Lakewood, CO

Colorado Professionals in Onsite Wastewater  
Kate Carney at (720) 626-8989 or [cpow@cpow.net](mailto:cpow@cpow.net)

### November 15, 2013 - Arlington, TX

RETS - Real Estate Training Systems  
RETS at (817) 861-9998 or [rets@rets-llc.com](mailto:rets@rets-llc.com)

## INSTALLER WORKSHOPS

### October 3-4, 2013 - Lakewood, CO

Colorado Professionals in Onsite Wastewater  
Kate Carney at (720) 626-8989 or [cpow@cpow.net](mailto:cpow@cpow.net)

## OPERATION & MAINTENANCE TRAINING CERTIFICATION:

### October 2-3, 2013 - Napa, CA

COWA, Evelyn Rosefield at (530) 513-6658  
or [evelyn@cowa.org](mailto:evelyn@cowa.org)

### December 4-5, 2013 - Napa, CA

COWA, Evelyn Rosefield at (530) 513-6658  
or [evelyn@cowa.org](mailto:evelyn@cowa.org)

## OTHER CEU'S FOR RECERTIFICATION:

### May 13, 2013 - Tucson, Arizona

ATUs and Media Filters  
Univ. Of AZ, Janine Lane at (928) 782-5882  
or [janinel@cals.arizona.edu](mailto:janinel@cals.arizona.edu)

### May 14, 2013 - Tucson, Arizona

Drip Dispersal Systems  
Univ. Of AZ, Janine Lane at (928) 782-5882  
or [janinel@cals.arizona.edu](mailto:janinel@cals.arizona.edu)





# NAWT

National Association of Wastewater Technicians

# NEWS

▶ Volume VII, Issue 2

A Quarterly Newsletter from the National Association of Wastewater Technicians

## September 2013 Waste Treatment Symposium

Most of the water used by homes, industries and businesses much to treated before it goes back into our environment. The Bureau of Labor Statistics, U.S. Department of Labor, states that employment of water and wastewater treatment plant and system operators is projected to grow 12 percent from 2010 to 2020, about as fast as the average for all occupations. Job prospects are expected to be excellent. NAWT is hosting the 6th Waste Treatments Symposium this September 25-26, 2016 at James Penner, AA Septic Service & Rotary Sewer Cleaning, Inc., dewatering facility in Indianapolis (Clayton), Indiana.

Those who attend will learn from those who are already in the business. Learn the water treatment process, review case histories that are presented, understand the economics of unit processes, and tour an operating facility. Additionally there will be equipment manufactures there so you can weight the pros and cons of different equipment, you can see equipment operate with real seepage and greases. The symposium lasts two days covering a range of expert presentations and system integration. There will be educational opportunities, coffee breaks, lunches, exhibits, and an evening reception.

## NAWT Shoot-Out Competition at the Expo

This years 2nd Annual Shoot-Out was held at the Pumper and Cleaner Expo in Indy. This years event came down to a second that set some winners apart from their competition. The Shoot-Out is made possible through sponsors and all

the great prizes they donated. NAWT would like to personally thank each of our sponsors for their generous contributions. Here were the four competitions and the top prizes awarded this year.

### Vac Truck Vane Challenge –

Fruitland RCF-500 SFL, valued over \$5,000

### Tank Pump & Alarm Installation –

SJE-Rhombus Alarm and a Champion Pump

### Aerator Assembly –

Septic Services Inc. Aerator

### Safety Pre-Trip Inspection –

Progress VacTruck Jacket and a \$250 gift card

In addition to these generous sponsors both **Crust Busters** and **Bright Dyes** made cash donations to help fund the NAWT Pre-Expo workshops.



**On behalf of the NAWT Board of Directors and NAWT Members – thank you for your generosity and support.**

# NAWT Pilots Design Principles Course

One of the Pre-Expo workshops that NAWT provided Saturday and Sunday before the Pumper and Cleaner Environmental Expo was a new two day course covering the principles of design. The course was conducted at Camp Camby located about 15 miles outside of Indianapolis. This is a unique site which provides the ability to have first class classroom space and then step outside and be able to look at a variety of on-site systems varying from the systems serving the Camp dining and athletic facilities, to cluster and individual systems serving cabins owned by the Camp and private individuals. In addition, the Camp has excellent dining facilities; not to mention the food is good too!

The course was conducted over a two day period and had a field and hands on soil evaluation component included. The course was not regulation driven; the goal is to provide principles that can be used in the context of the state or local regulations and it is the designer's responsibility to know and apply design principles in accordance with their state rule. The principles remain the same regardless of how the regulations change or do not change. The course provides a philosophy of how to approach design. Designing for the long term is important because this means that the opportunity for long term system management is built in and corners are not cut.

The first part of the course provided a discussion about the importance of the relationship between designer,



Wendy Blanchard from Boulder County Health Department, Kim Seipp, NAWT member and instructor and Denise Wright of Indiana Department of Health try their hand at determining soil texture.

installer and client being a key to a "good" system that will last for years. Preliminary information that is needed and the introduction to a site evaluation is discussed. Land survey methods and the documentation needed is also discussed.

**The following additional topics rounded out the first day of the course:**

**Matching the System to the Site:** Identifying key soil and site conditions which will dictate the type of system selected. Setbacks and Soils; the most common mistakes are soils related; how to avoid the mistakes. Installation principles are discussed and the need to keep the systems shallow, and the soil dry and natural.

**The Systems User:** Hydraulic and Organic Loading are discussed in the context of the impact the user has on system choices and design parameters.

**Soil Treatment Systems:** The class was provided an explanation of soil sizing factors. Examples of system sizing and layout; conventional trench layouts and the different gravity distribution mechanisms were provided. Mound design and layout; how much area is needed; slope issues and how to distribute the effluent were discussed.



The design class measuring the distance to the first soil boring as part of the locating and mapping exercise.

**Using Pumps:** Pumps should be viewed as conventional technologies and one of the first decisions to be made is whether there needs to be a pump somewhere in the system. Pump sizing; system considerations; elevation differences, friction loss issues; how to make the right pump choice all were discussed.

**Pressure Distribution:** Laying out Pressure distribution; level or unlevel; what the designer needs to know; were discussed.

**Applying technology to Systems:** A review Of what kind of system works best to solve the problem was provided. There were discussion of single pass and re-circulating media filters; discussion of ATU's and impacts that different kinds of users can have on their performance.

**System Loading:** what waste characteristic are for the different users were discussed; Camp Camby systems were

used as examples. The exercise included estimating flows and use patterns and exploring the implications they have for pre-treatment technology selections.

**Field Work:** Site evaluation; Take a look at the soils and the landscape characteristics of the site. Go through the site evaluation process; soil borings; perc tests; elevation differences. Soil samples were provided and the class practiced determining soil texture.

A set of initial exercises that included determining distance and elevation differences was conducted. Surveying and locating important aspects of the site were conducted in the field and a system was laid out on the land in the field. Soil borings were conducted and evaluated at the site.

If you have an interest in conducting such a course in your state you can contact Jim Anderson through the NAWT website or by phone.

## Scholarship Awarded

This year the scholarship task at hand was to create and design a slogan or a bumper sticker representing NAWT, and then write a short essay of why their's should be chosen.

Elizabeth Rachlin received \$1,000 for her submission. Her bumper sticker "Why NAWT" was simple yet creative. Using the newly designed NAWT logo in the design will be recognized by many. Those who are not familiar with NAWT may be intrigued enough to say, "hum, "Why NAWT" what is that all about?". It could provoke that individual to look up NAWT on the internet, the website is included on the design as well. So there's an invitation there to welcome people to learn more about what NAWT is all about. There was tough competition this year for the committee to rank the submissions as many of them were creative ideas, but Elizabeth's came out on top. She was awarded the \$1,000 check in person at the State Association Breakfast at the Pumper and Cleaner Expo in Indianapolis on February 27, 2013. Congratulations Elizabeth.

The William Hapchuck Memorial Scholarship Program is awarded annual to a participant to a current full-time college student majoring in environmental science, life, science, or related curriculum. The application can be

submitted either electronically or as a paper copy. The application deadline is January 1st of the new year. There is a Scholarship Committee that evaluates and scores all the essays according to originality, clarity, and composition. These criteria are scored by a point system and the individual acquiring the most points over all is awarded the scholarship.

This scholarship is made possible by people like you. Make your donation today in memory of William Hapchuk and you will be making a different in some student's life. NAWT is confident that their academic growth will continue during studies and furthermore be a positive impact on our industry at it moves into the future.

