Cover art from “The Ohio Sanitarian” journal in 1954. “Published Quarterly by the Sanitarians in the City and District Health Departments of Ohio”

The object and purpose of the Association shall be the betterment of the health and welfare of mankind through the improvement of the environment. This shall be done by sponsoring state and regional meetings and publications, by developing methods of measuring and evaluating achievements in environmental health, the establishment of a central point of reference and education material for the membership, the procurement of cooperation with other agencies and organizations, and such other activities as will lead to the greater efficiency and professional growth of the membership.

**Ohio Environmental Health Association Board of Directors**

**President**  
Chad Brown, R.S., REHS, MPH  
Licking County Health Department

**President Elect**  
Paul DePasquale, M.P.A., R.S.  
Start County Health Department

**Past President**  
Jerry Bingham, R.S.  
Toledo-Lucas County Health Department

**Vice President**  
Garrett Guillozet, R.S., REHS, AEMT  
Franklin County Public Health

**Vice President Elect**  
Treva Stetson, R.S.  
Summit County Public Health

**Treasurer**  
Mary Helen Smith, MPH, CPH, R.S., REHS  
Portage County Combined General Health District

**Secretary**  
Joe Herrod, R.S., REHS  
Richland Public Health

**Northeast District Director**  
Tom Blackford, R.S.  
Lorain County General Health District

**Northwest District Director**  
Marcia Dreiseidel, MS, R.S.  
Union County Health Department

**Southeast District Director**  
Greg Chunney, R.S.  
Licking County Health Department

**Southwest District Director**  
Dustin Ratliff, MPH, REHS  
Warren County Combined Health District

**Ohio Journal of Environmental Health Publications Committee**

Adam R. Howard, R.S., REHS  
Delaware General Health District  
ahoward@delawarehealth.org  
740-203-2069

Dustin Kent, MPH, R.S.  
Delaware General Health District  
dkent@delawarehealth.org  
740-203-2058

Tracy L. Buchanan, R.S.  
Ohio EPA  
tracy.buchanan@epa.ohio.gov  
937-285-6045

**Publication Information**

The Ohio Journal of Environmental Health is published by the Ohio Environmental Health Association (PO Box 234, Columbus, OH 43216-0234). An average of $20 of a member’s annual dues contribute to the publication. A one year subscription, without membership, is available at a cost of $60.

Postmaster send address changes to: 2818 Annabelle Ct, Grove City, OH 43123. Second Class Postage Paid. Grove City, Ohio.

Other correspondence relating to address changes, applications for membership and other matters should be addressed to: Ohio Environmental Health Association, Vicki Johnson, Administrative Aide, PO Box 234, Columbus OH 43216-0234; Phone 614-871-0665.

The articles herein published represent the work of the designated author(s). The facts, opinions, and findings represented in the articles are those of the author(s) and do not necessarily represent the facts, opinions, and findings of the Ohio Environmental Health Association nor the publications committee.

The appearance of advertising in this publication does not necessarily include its endorsement.

To include articles or other materials for publication, contact: Adam Howard, Dustin Kent, or Tracy Buchanan

---

**Advertisement Rates**

<table>
<thead>
<tr>
<th>Format</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Page</td>
<td>1x: $190  4x: $146</td>
</tr>
<tr>
<td>1/2 Page</td>
<td>1x: $120  4x: $89</td>
</tr>
<tr>
<td>1/4 Page</td>
<td>1x: $79  4x: $54</td>
</tr>
</tbody>
</table>
# Table of Contents

President’s Message ................................................................................................................. 4  
Chad Brown, R.S., REHS, MPH - Licking County Health Department

Featured District Director’s Message ....................................................................................... 6  
Marcia Dreiseidel, MS, R.S. - Union County Health Department

News from the Board ............................................................................................................. 7  
Tracy Buchanan, R.S. - Ohio EPA

Using Models to Solve the Linear Loading Rate Dilemma .................................................. 8  
Colin Bishop, REHS, R.S.

Environmental Health Fundamentals ..................................................................................... 10

OEHA Annual Educational Conference .................................................................................. 11  
Garrett Guillozet, R.S., REHS, AEMT - Franklin County Public Health

Environmental Health Compliance .......................................................................................... 14  
Stephan Ruckman, R.S. MPH - Public Affairs Chair

The Direction of the Ohio Journal of Environmental Health ................................................ 17

Publications Committee

OEHA Introduces new Website ............................................................................................... 17  
Garrett Guillozet, R.S., REHS, AEMT - Franklin County Public Health

Erie County Health Department Regional Response Water Laboratory .............................. 18  
Craig Ward, R.S. - Erie County Health Department

Announcements ....................................................................................................................... 19

From the Vault “Professional Recognition of Public Health Sanitarians in Ohio” ................ 20  
A.H. Fishback - Ohio Department of Health. Published in 1954

Legislative Updates ................................................................................................................ 21

Committees & Chairs ............................................................................................................. 23

Advertisements

<table>
<thead>
<tr>
<th>NSF</th>
<th>Jet Wastewater Treatment Solutions</th>
<th>Polylok</th>
<th>FetchGIS</th>
<th>Nominations</th>
<th>State Board of Sanitarian Registration</th>
<th>Eljen Corporation</th>
<th>Norwalk Concrete Industries</th>
<th>ERG Environmental Services</th>
<th>Anua</th>
<th>Kent State University College of Public Health</th>
<th>Norweco</th>
<th>Infiltrator System Inc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ohio Journal of Environmental Health
I can’t believe my term as OEHA president is almost up. By the time you read this message, I will have likely passed the gavel to Paul DePasquale as our new president. It has been a privilege to serve our great organization, and I think it has been a pretty productive year! We have worked to assist with finding a common sense solution to the concerns with the food survey methodology being implemented by ODH and ODA. In May of 2016, Rep. Brian Hill introduced House Bill 551, which contained measures that would satisfy our concerns. The bill received 2 hearings, but the political clock ran out before an actual vote on the bill could occur. However, in February of 2017, Rep. Hill introduced HB 65, which contains the same language as HB 551. I’m hopeful this bill will result in the solution we have been looking for over the past 2-plus years. This effort would not have been possible without the assistance of our lobbyists Zach Holzapfel, Tony Brigano and Erik Mikkleson with Hicks Partners. Their work and dedication to our association is unmatched!

However, this isn’t the only thing we’ve worked on over the past year! The association has also worked to offer its first ever EH Leadership Class. The class is designed for promising sanitarians and supervisors that hope to become EH Directors. We are hoping to make this an annual training event. We also held a meeting for the EH directors from across the state. Over 80 directors attended, and we had a great conversation regarding how to move our profession forward. This will also likely be an annual event. The board is proposing changes to our bylaws that will make it easier and more efficient to develop and distribute our journal. The changes will allow us to distribute the journal electronically, which will dramatically reduce the cost of producing the journal. There are other proposed changes to the bylaws, and all of the changes have been distributed to our membership, and they are posted on our website. Speaking of our website, we have redesigned the website, and we will now be able to offer online conference registration and membership renewal. The website will also make it much easier to distribute messages to the membership and it will be easier to maintain.

I have been honored to serve on the board with outstanding and dedicated members, and without a group effort, none of this would have been possible.

In closing, I would like to say thank you. Thank you for allowing me to serve as OEHA president. It has been an amazing experience, and I have enjoyed every second. I’ve learned a lot, and I’ve made a lot of friends from across the state. I did my absolute best to serve the association with dignity, and I’m hopeful you all are pleased with the progress the association has made over the past year.
The OEHA Annual Education Conference is just around the corner. I hope you’ve been able to take a look at the agenda and are planning to attend. There is a wide variety of topics being covered, something for everyone. Come be a part of it all, including the OEHA Meet and Greet! I’m looking forward to seeing many of you there!

The Northwest conference planning committee has been meeting regularly to come up with topics and speakers for this year’s fall conference. We have a nice mix of experience and expertise on our committee that makes this process great! Everyone on the committee is working hard to come up with fresh ideas and dynamic speakers to make the conference a success. As soon as the agenda is complete, it will be added to the website for everyone to view.

We hope you’ll join us at The Nia Conference Center at Kalahari Resorts on October 12 & 13, 2017 in Sandusky, Ohio. Plan to bring the whole family to take advantage of the great rates and enjoy the water park!

The Nominations Committee is accepting nominations for the following positions on the Board of Directors.

**President-elect**  
**Vice President-elect**  
**Treasurer**

If you are interested, please contact Josh Niese at niesej@co.lucas.oh.us
Recently, the Sanitarian Registration Board has received a number of inquiries pertaining to online, pre-approved courses – questions like “What’s pre-approved” and “Where do I find a list of pre-approved courses”? The Board generally receives an influx of these type of questions as renewal time approaches and this year is no exception. So let’s take closer look at pre-approved courses and what is required to receive credit for them.

Everyone needs to know that all FEMA, NEHA and CDC on-line courses are pre-approved each year. These pre-approved on-line courses are located on the RS Board website under the category of “FAQ to On-Line Education”. A listing of other courses offered by various approved training agencies are listed on the website under “Continuing Education” following each Board meeting. These courses are held at various locations across the state and some are available online.

Once you locate an on-line course that sounds enticing and, of course, educational – complete any registration requirements and proceed at your own pace. All FEMA, NEHA and CDC courses will provide you with a certificate of completion when you finish the course. The certificate will have the date you completed the course and provide number of CEU’s awarded. When you receive that certificate, all you need to do is to forward it on to Stephanie Youst at the Board Office and she will record it in your file. You can forward your certificates by mail, email or fax. That’s it!

Please be aware that CDC courses can be a little trickier as there are instances when you may be directed to another website which may offer a course that looks good but may not be pre-approved. Proceed cautiously. Upon completion of a CDC on-line pre-approved course, you should also receive a certificate of completion. As with the FEMA and NEHA courses, forward that certificate to Stephanie Youst and she will record it in your file. It is important to note that all CDC approved courses will have the CDC logo on the certificate. If it does not, then you have most likely completed a course that was not approved. You can always submit courses for approval that are not pre-approved; however, if you are pressed for time (nearing your registration expiration) you may not receive credit before your registration expires. Obviously the timing is crucial in these instances.

The majority of on-line webinars are NOT pre-approved course offerings. In the event you participate in an on-line webinar, you may not receive a certificate but rather a registration email and an email verifying completion of the course. To receive credit for your participation, you will need to submit a completed CE2 form, the registration, course completion emails and a copy of the PowerPoint presentation to Stephanie Youst. You may also use “CE Verification Form” if you did not receive a verification email or registration confirmation. This form is available on the Board website under “Forms” and must be signed by your supervisor, manager, or someone in your office who can verify that you did complete the on-line course. The Board will no longer be accepting online courses/webinars where your attendance cannot be verified.

In a nutshell – that’s how it works. It’s not a mystery but if you are in a hurry, it can get a little confusing. Plan ahead so you don’t find yourself in a situation where you are frantically searching for CEU’s! Still have questions? Contact Stephanie Youst at the Board Office at (614) 466-1772 or stephanie.youst@san.ohio.gov and she’ll be happy to help you.
When my oldest daughter was a pre-kindergartener, she was watching an episode of Elmo. Elmo was teaching about different shapes. Shapes would appear on the TV screen and Elmo would say, “that’s a square” or “that’s a triangle”. After watching this for a while, my daughter blurted out something to the effect of, “I don’t like Elmo and the shapes, turn it off”. When evaluating a property for site suitability, we have felt this same sting of just wanting to “turn it off”. This is typically because the property is a weird triangle or some other less than rule-friendly shape. On top of it, the soils might be horrible and there could be a high seasonal water table. We know the all too familiar feeling that this is a difficult site due to limiting conditions!

One challenge Chapter 3701-29 presents for some sites is conformance with Table 4. Hydraulic Linear Loading Rate (HLLR) values are defined in Table 4. HLLR is the daily volume of effluent applied to the soil over a certain distance (hopefully on contour!). Think of it this way, if we dump a five gallon bucket of water in a trench that is one foot long, our HLLR is 5 gpd/ft. If we dump that same 5 gallon bucket in a trench that is 6 inches long, our HLLR is 10 gpd/ft. So what’s the issue? The issue is water will always go somewhere. Depending on what is going on beneath the ground surface, water can move in all directions. We want to keep effluent from surfacing and from contaminating groundwater. If the application of effluent over time is greater than can be assimilated, water mounding can occur. In simple terms, we see evidence of this every day in surfacing effluent or break-out on a slope. So another way to think about HLLR is a number that will guide us to an appropriate drainfield length. Keep in mind that HLLR rate does not take into account the instantaneous dose volume or dose rate. We will save that discussion for another article.

Soil texture and structure, and site slope are the factors used to determine the HLLR. So what if the property is 100 feet wide but the HLLR calculates a drainfield length requirement of 110 feet? Fortunately, OAC 3701-29-15(N)(2)(i) allows for “alternative methods” for determining HLLR. So what are some of the alternative methods and how do they work? The alternative methods described in this article will calculate if water mounding occurs at a certain length of drainfield with a certain volume of effluent application. Once we calculate the drainfield length where no water mounding will occur, then we know we have calculated an acceptable HLLR. The good news is that oftentimes the calculated HLLR, using models, allows for a shorter drainfield than using Table 4.

The first alternative method is the situation where a slower permeable soil is beneath a more permeable soil. The formula for water mounding is found in chapter 13 of Septic Systems Handbook by O. Benjamin Kaplan. The information we need to run the model is the following:

- Daily design flow, Q
- Higher permeable soil saturated hydraulic conductivity, Ksat1
- Slower permeable soil saturated hydraulic conductivity, Ksat2
If saturated hydraulic conductivity field tests are not performed, then estimates can be used. Tables of Ksat estimates can be found in various textbooks or research papers. The Virginia Department of Health has a Ksat table in their Alternative Onsite Sewage System regulations. The formula described by Kaplan is the following:

$$\text{Height of water mounding} = \sqrt{Q^2 + \left(2 \times K_{\text{sat}1} \times K_{\text{sat}2}\right)}$$

The second alternative method is the situation where a water table is beneath the drainfield soil. The formula for water mounding is found in the 1980 paper Hydraulic Mounding of Groundwater Under Axisymmetric Recharge by Dan H. Allen. The information we need to run the model is the following:
- Daily design flow, Q
- Drainfield length, L
- Drainfield width, W
- Soil saturated hydraulic conductivity, K
- Water table depth of saturation, D

Height of water mounding formula:

$$H_{\text{max}} = \frac{q'}{K_1 \left( \frac{q'}{K_2} - 1 \right)}^{1/2}$$

The third alternative method is the situation where the drainfield is on a sloped site and the horizontal water movement can be greater than the vertical water movement. The formula for water mounding is found in the 2005 paper Designing Cluster and High Density Wastewater Soil Absorption Systems to Control Groundwater Mounding by Eileen Poeter, P.E., Ph.D., et al. The information we need to run the model is the following:
- Daily design flow, Q
- Drainfield length, L
- Drainfield width, W
- Horizontal saturated hydraulic conductivity, upper layer K1
- Vertical saturated hydraulic conductivity, lower layer K2

Height of water mounding formula:
If math makes your head hurt, you are in luck! Spreadsheets of the models presented in this article are available from the author. With the spreadsheets, a suitable HLLR can easily be determined by the designer and checked by the health department. The alternative models for determining HLLR allowed by Chapter 3701-29 has turned out to be very helpful for designing on-site solutions for difficult sites. The models demonstrate that subsurface effluent dispersal can be accomplished on-site while meeting the rules.

For more information, contact Colin Bishop at colin.bishop@anuainternational.com or 409-466-4644.

References:

Environmental Health Fundamentals

(aka the RS Exam Prep Class)

When: April 6-7, 2017
Where: Doubletree Worthington

Attention all SITs!

Don’t miss this year’s fundamentals course! The classes will be held during the Annual Education Conference at Doubletree Worthington on April 6-7, 2017. We believe this is an excellent opportunity for those currently studying for the RS exam or students considering taking the exam. The course will cover important topics of environmental public health aimed at preparing attendees for both their careers and the exam. Please look for addition information in your Annual Educational Conference packet or check www.ohioeha.org regularly for updates.

Passed
67%
Did not pass
33%

Those passing the exam on the first attempt after taking the 2016 EH Fundamentals Course

“Speakers were very interesting” - 2016 Attendee

“The speakers were very knowledgeable and helpful” - 2016 Attendee

“Fantastic job to all” - 2015 Attendee

“Excellent instructor all of them. Thank you!” - 2015 Attendee
On behalf of OEHA President Chad Brown, the Board of Directors, and the Planning Committee, it is my pleasure to invite you to the 71st Annual Educational Conference at the Worthington Doubletree Hotel on April 6th and 7th. The Planning Committee has been hard at work putting together a great agenda for this year.

Returning conference features
- 12.5 continuing education credits from the R.S. Board
- Continuing education hours for pesticide applicators and wastewater operators
- A two-day review session with training materials for SITs preparing to take the examination to become a Registered Sanitarian
- Vendors displaying the latest in public health services, equipment and software

Entertainment and fun
- Silent Auction to raise funds for the George Eagle Memorial Scholarship Fund
- Pre-conference golf scramble with shotgun rounds starting at 11:00am on Wednesday, April 5th at the beautiful York Golf Club, located at 7459 N. High Street, Columbus, 45235. The cost is $75.00 per person.
- Meet and Greet the evening of April 5th, beginning at 6:00pm at the Winking Lizard located across from the DoubleTree Hotel (food will be provided)

Registration and room rates
- $150 per member for both days, $235 for non-members
- We have reserved a block of rooms at a discounted rate of $106 per night - make your reservations early to take advantage of this conference rate!
- Everyone who stays at the hotel is entitled to a delicious hot breakfast!

Keep an eye out for our new OEHA website that will launch in March!

Please take a moment to share the conference materials and our website link with your professional associates and prospective new members.
www.ohioeha.org

Please contact me with your questions at: 614-525-4537 or by emailing garretguillozet@franklincountyohio.gov

See you at the conference!
## 2017 OEHA Annual Education Conference Agenda

**DRAFT** **NOT FINAL**

Total Possible CEUs: 6.5 (2 General Sessions, 4 Breakout Sessions, and .5Hr Legislative Update)

<table>
<thead>
<tr>
<th>April 6, 2017</th>
<th>SESSION TITLE</th>
<th>SPEAKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 8:30</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>8:30 – 8:35</td>
<td>VP Welcome</td>
<td>Garrett Guillozet</td>
</tr>
<tr>
<td>8:35 – 8:45</td>
<td>President’s Address</td>
<td>Chad Brown</td>
</tr>
<tr>
<td>8:45 – 9:00</td>
<td>OEHA Business Session</td>
<td>Chad Brown</td>
</tr>
<tr>
<td>9:00 – 10:00</td>
<td>Food Safety &amp; The Science of Norovirus</td>
<td>Gojo</td>
</tr>
<tr>
<td>10:00 – 10:10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:10 – 11:10</td>
<td>Concurrent Session</td>
<td></td>
</tr>
<tr>
<td>10:10 – 11:10</td>
<td>Voluntary National Retail Food Regulatory Program and Standards</td>
<td>Chris Moore</td>
</tr>
<tr>
<td>10:10 – 11:10</td>
<td>OEPA’s Scrap Tire Program</td>
<td>Kelly Jeter, Janice Church</td>
</tr>
<tr>
<td>10:10 – 11:10</td>
<td>Swimming Pool Operations and Outbreak Response</td>
<td>Adam Holbrook, Sarah Badenhop</td>
</tr>
<tr>
<td>10:10 – 11:10</td>
<td>Small Lot and Linear Loading: How Do I Fit It In?</td>
<td>Colin Bishop</td>
</tr>
<tr>
<td>11:10 – 11:15</td>
<td>Room Change</td>
<td></td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Concurrent Sessions</td>
<td></td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Grease Interceptors and What you need to Know</td>
<td>Frank Brykalski</td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Removing the mystery of Legionella in building water systems</td>
<td>Steve Elrich</td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Health Space User Tips and Tricks</td>
<td>Joseph Willmot</td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>12:15 – 1:30</td>
<td>Lunch and Legislative Update</td>
<td>Hicks Partners</td>
</tr>
<tr>
<td>1:30 – 1:35</td>
<td>Room Change</td>
<td></td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>Concurrent Sessions</td>
<td></td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>End of Post-Closure Care</td>
<td>Annette De Havilland</td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>Prepacked Extended Aeration Unit O&amp;M Part 1- Basic Operation</td>
<td>Jon Van Dommelen</td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>Tobacco 21</td>
<td>John Richter</td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>Vertebrate! Can’t live without them. Can’t live with them.</td>
<td>Nancy Holderman</td>
</tr>
<tr>
<td>1:35 – 2:35</td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>2:35 – 2:40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>Concurrent Sessions</td>
<td></td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>Salmonella Outbreak and Investigation at a Food Service</td>
<td>Steven Rich</td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>Prepacked Extended Aeration Unit O&amp;M Part 2- Compliance</td>
<td>Jon Van Dommelen</td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>WATER BREAKOUT-TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>Overview of CDC’s Public Health Associate Program (PHAP)</td>
<td>Evan Jones, Jennifer Polk</td>
</tr>
<tr>
<td>2:40 – 3:40</td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>3:40 – 3:45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:45 – 4:45</td>
<td>Toledo Lead Ordinance</td>
<td>Josh Niese</td>
</tr>
</tbody>
</table>
## 2017 OEHA Annual Education Conference Agenda

**DRAFT** **NOT FINAL**

Total CEUs- 6 Hours (2 General Sessions, 4 Breakout Sessions)

<table>
<thead>
<tr>
<th>April 7, 2017</th>
<th>SESSION TITLE</th>
<th>SPEAKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:45 – 8:30</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>8:30 – 8:35</td>
<td>OEHA VP Follow-up</td>
<td>Garrett Guillozet</td>
</tr>
<tr>
<td>8:35 – 9:35</td>
<td>Personal Safety and Awareness</td>
<td>Chris Pawelski</td>
</tr>
<tr>
<td>9:35 – 9:45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:45 – 10:45</td>
<td>Concurrent Session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improving Onsite Wastewater Mapping using GIS Application</td>
<td>Ken Curry</td>
</tr>
<tr>
<td></td>
<td>Playground Safety</td>
<td>Greg Hennecki</td>
</tr>
<tr>
<td></td>
<td>What to look for in an Infectious Waste inspection</td>
<td>Holly Hillyer and Alison Shockley</td>
</tr>
<tr>
<td></td>
<td>Well logs: Stamp, file, what should I do next?</td>
<td>Dustin Kent</td>
</tr>
<tr>
<td></td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>10:45 – 10:50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:50 – 11:50</td>
<td>Concurrent Session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leadership- A Full Contact Sport at Any Level</td>
<td>Eric Zgodzinski</td>
</tr>
<tr>
<td></td>
<td>Microblading: What is it?</td>
<td>Sarah Badenhop</td>
</tr>
<tr>
<td></td>
<td>Micro- Markets and Vending (Coffee and Food)</td>
<td>Carla Variglotti</td>
</tr>
<tr>
<td></td>
<td>State Board of Sanitarian Registration: “Moving Towards the Future</td>
<td>Stephanie Youst &amp; RS Board Members</td>
</tr>
<tr>
<td></td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>11:50 – 1:15</td>
<td>Buffet Lunch &amp; Visit Exhibitors</td>
<td></td>
</tr>
<tr>
<td>1:15 – 2:15</td>
<td>Concurrent Session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outbreak of Clostridium perfringens</td>
<td>Adam London</td>
</tr>
<tr>
<td></td>
<td>Circle of Care</td>
<td>Peter Schade</td>
</tr>
<tr>
<td></td>
<td>What to do with HHW?</td>
<td>Mark Adams</td>
</tr>
<tr>
<td></td>
<td>Vector/Pesticides</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>2:15 – 2:20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:20 – 3:20</td>
<td>Concurrent Session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Value of Census Data in a Community Health Assessment</td>
<td>Tim Sarko</td>
</tr>
<tr>
<td></td>
<td>Pool Safety - Preparing for New Rules</td>
<td>Cory Schwabb</td>
</tr>
<tr>
<td></td>
<td>Work Force Development: FDA Grant, Improving Food Safety by Identifying Staff’s Training Needs</td>
<td>Camille Jones, M.D., Mohammad Alam, Ph. D, Ken Sharky</td>
</tr>
<tr>
<td></td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>SIT Class</td>
<td></td>
</tr>
<tr>
<td>3:20 – 3:30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30 – 4:30</td>
<td>The Future of Environmental Health</td>
<td>Adam London</td>
</tr>
<tr>
<td>4:30 – 4:45</td>
<td>Closing remarks, closing of business meeting, raffle &amp; door prizes</td>
<td>Chad Brown</td>
</tr>
</tbody>
</table>
Abstract

The topic of enforcement ideology has recently gained attention in Ohio and nationally as we strive to find the best approach to protecting the public we serve while meeting accreditation standards. The discussion over sound environmental health practice and the place that education holds with regard to gaining compliance is not new, however, new interpretations arise daily. This article will take a look at the background and future of environmental health inspection, the ideology of those charged with enforcing environmental health laws, and the psychological principles behind certain non verbal strategies that are employed. The purpose of this examination is to allow the reader to become educated on the merits of each approach and share that information with new and experienced sanitarians alike.

Background

In Ohio, there’s a myriad of approaches to enforcing the Ohio Administrative Code, Municipal Code, and Local Board of Health Regulations. While these approaches may vary dramatically, the end goal is the same. And that is to provide a safe and healthy environment for the public and to prevent the development of conditions that could result in harm. Contained in the continuum of enforcement approaches, lies the answer to not only gaining compliance, but developing sustainable relationships. After all, history tells us that sound environmental health practice seems to be anchored in the relationship between the sanitarian and the operator, home owner, or licensee.

Efforts toward improvement in environmental public health conditions are not new. Many of us quickly recognize the efforts made in the 1800’s when Dr. Thomas Smith and several colleagues at a London Fever Hospital discussed the importance of quarantine practice and improving sanitary conditions for the prevention of cholera and yellow fever. We also recall the work of Sir Edmund Chadwick with the introduction of The Sanitary Condition of the Labouring Population as well as the work of John Snow in identifying contaminated water from a well as the source of a Cholera outbreak in London in 1854. But, they are not alone in setting the foundation and they are certainly not alone in a passion for ensuring optimal environmental health conditions exist. Many at the time might have argued the John Snow removing the water pump handle to the Broad Street pump took the public’s right to drink water away, but we’ve learned that it was a monumental step to protecting public health and a model for modern epidemiology. We’ve also learned through history that in most instances educating the public is essential to gaining compliance and trust. Perhaps Lawrence Gostin said this best “The very strengths of public health authorities (e.g. neutrality, expertise, and broad powers) can become liabilities if they appear politically unaccountable and aloof from the real concerns and needs of the governed.” When we consider the needs of the governed were are drawn to a term that anchors much of the work being done nationally in environmental public health and that is a risk based inspection.

The Risk Based Inspection

Many of us recall previous iterations of the Ohio Administrative Code related to food safety that seemed to have an equal focus on routine items as well as those many sanitarians would consider critical to preventing the transmission of foodborne illness. The current standard inspections under the uniform food safety code (Ohio Administrative Code 3717) and accompanying critical control point and process review inspections for level 4 facilities provide a much stronger emphasis on risk based inspection. This does not, however, mean that some still do not give equal weight to items that others would deem non-critical. It simply means that in Ohio, the focus for most Local Health
Department Sanitarians is critical violations. The FDA promotes this type of inspection in Annex 5 of the Food Code by stating “Inspectors need to spend the majority of their time observing the behaviors, practices, and procedures that are likely to lead to out-of-control foodborne illness risk factors and asking management and food employees questions to supplement actual observations.” Although this example is related to food safety, it certainly can be applied to all areas of environmental health. Identification of risk and the ability to explain the relationship of risk to disease transmission is a skill that sanitarians can use to not only empower themselves, but to create positive relationships in the community. Understanding the why of the inspection is just as important as how the inspection is conducted. With this in mind we turn to a key element of inspection and that is non-verbal communication.

Understanding Non-Verbal Behavior As It Relates to Compliance

Much research has shown that providing a basis for someone to mimic in new situations is important to gaining the desired result. Mimicry can guide humans when they are faced with foreign situations. A good example of this is how the sanitarian conducts themselves while in a food service operation. If the sanitarian shows good habits while inspecting including, but not limited to proper handwashing, monitoring temperatures, educating staff then the manager is more likely to do so. Another example of this is how the sanitarian is seen in the community. If they follow, promote, and encourage good environmental health practice, those they are asking to do the same have a greater chance of doing so. With this in mind, we see that non-verbal communication can be just as important as any other factor of gaining compliance.

Non-verbal communication including, but not limited to facial expressions, body position, and tone of voice can affect the delivery of messages. An example of this is eye contact and spacing. Each have been shown to impact compliance. Studies demonstrate that maintaining eye contact and respecting personal space have a positive influence on compliance. Sanitarians may be more effective if they use this knowledge during inspection. In addition, maintaining a calm demeanor and speaking softly can often diffuse confrontation regardless of the situation. Most environmental health professionals will encounter an angry individual sometime during their career. Thinking outside the box and learning from other professions can be helpful. A good example to follow is how professional referees approach angry coaches, fans, and players. Most utilize soft speech and body position to the side of those they are discussing situations with in order to providing a calming influence.

Conclusion: Absolute Power… Or is it?

There are few sanitarians that will say they prefer to be involved in enforcement proceedings. Even less will likely want to utilize a police power approach to inspection. Even fewer would want to wield a badge or a gun to get things accomplished. But, that’s not to say that the ideology doesn’t exist. It is also not to say that it may become necessary in some circumstances. However, as this brief article points out there are other tools that sanitarians can utilize to establish longevity of compliance based on risk and sound inspection techniques instead of short term solutions based on enforcement only approaches. Fear and consequence is certainly a
motivator, but fear alone cannot be the end. Responsible application of laws and not overextending authority are essential. Most environmental public health professionals avoid the “badge mentality” for this very reason recognizing that in most cases the impact of education produces more beneficial and longstanding results. Although sanitarians function under authority granted by various levels of statute, it is important to recognize that statutory authority can change. We’ve learned from previous court cases that Board of Health authority can and will be challenged. Two examples of this are Cookies Diner, Inc. v. Columbus Board of Health (Franklin County, Ohio Mun. Ct. 1994) and D.A.B.E. Inc. v. Toledo-Lucas County Board of Health (773 N.E. 2d 536 2002). These particular examples relate to local board of health smoke free regulations, however, there are challenges that occur at many other levels and for many other programs on a routine basis. The General Assembly changes laws, agencies change rules and interpretations, and interested parties weigh in mostly on experience they’ve had in their community. It’s not only a sanitarian’s right, many would argue that it’s their responsibility to conduct themselves in a manner that they will be respected and seen as the experts in field of environmental health. With this comes recognition that power is not absolute nor will application of said power always produce favorable results. Rather a focus on education, paying attention to non-verbal cues, and striving for long term results can be.

References
As we move forward revamping the journal, the committee thought it would be beneficial to share the general flow for future publication. Moving forward article submission deadlines will be:

- February 15 for the 1st quarter
- May 15 for the 2nd quarter
- August 15 for the 3rd quarter, and
- November 15 for the 4th quarter.

Article submissions are in seven categories. One article will come from the President of the association. Each quarter one District Director will be featured and asked to submit a report. First quarter will be Northwest, second quarter will be Northeast, third quarter will be Southeast, and the fourth quarter will be Southwest. District Directors may submit articles for each journal if they have information to relay to the membership. Another article will be an update on legislative issues. The next category is reserved for our partner Agencies such as ODH, Ohio EPA, ODA, and the State Board of Sanitarian Registration. Another category is those articles submitted from the various committees of the association. One section will be reserved for advertisements of the educational opportunities of the association and announcements (retirements, promotions, and obituaries). The final category is for general submissions. This category is open for submission from anyone who has an article that advances environmental public health. This could include a CQI project completed at your agency, an interesting project or study you recently completed, or any other article that would be of benefit to the association.

The committee makes a great attempt to ensure your article is printed in the way you intended, but at times some formatting adjustments need to be made to keep the flow of the journal. Articles are formatted in Times New Roman 11 pt font in two columns with 0.5” separation and 0.75” outer margins. Also, please turn off auto hyphenation. To ensure your article is published in your vision, please submit articles using these specifications in Microsoft word or publisher 2007 or newer.

If you would like to join the committee, please contact one of our members. We currently are a three member team that corresponds primarily through email.

---

**OEHA Introduces new Website**

Garrett Guillozet, R.S., REHS, AEMT
OEHA Vice President/AEC Chair

We are pleased to announce the unveiling of our new website at OhioEHA.org where you will find the latest member news, upcoming meetings and events, new membership directory and many other valuable resources available to you as an OEHA member.

Our membership database is now integrated with our website, which will allow you to update your membership profile, renew your annual dues, register and pay for events online!

We are here to help and appreciate your membership! If you experience difficulty accessing the new website, please delete your browsing history and/or cache. If you are having other technical difficulties or have suggestions on ways that we can improve our website or service to members, please contact us at info@OhioEHA.org
In 2016 Erie County Health Department built a laboratory that is designed to provide a regional location for potable water, recreational water, and wastewater testing. Our facility, which opened January 9, 2017, offers a quick response time to environmental emergencies that can occur unexpectedly. Adding water testing services within our department has benefitted our health district and all surrounding counties.

The need for a regional laboratory arose when we were unable to find a local lab capable of providing testing for harmful algal bloom (HAB) toxins, National Pollutant Discharge Elimination System (NPDES) parameters, or quantitative sample result for private water wells.

Our laboratory is capable of performing a variety of tests for municipality and residential private water systems. Laboratory services include recreational water sampling for E-coli, Total Suspended Solids (TSS), Dissolved Oxygen (DO), Carbonaceous Biological Oxygen Demand (CBOD), and Ammonia (NH₄). The ability to perform these tests locally will help both commercial and residential NPDES permit holders to obtain results rapidly and remain compliant with their Ohio EPA permits.

The potable water tests that this laboratory is certified to run are a colilert 18 hour presence/absence test as well as a colilert 18 hour quanti-tray test for most probable number (MPN). The MPN test allows our agency to perform a total coliform count on well water samples and ensure compliance with private water rules. The lab is also certified to run multiple HAB toxins including Microcystins, which are present in Cyanobacteria (blue/green algae) that are present occur in surface waters in Ohio.

All inquiries regarding our testing facilities can be directed to Jim Warner, Laboratory Manager at Erie County Health Department. He can be reached at 419-626-5623 extension 105 or jwarner@ecghd.org.
Announcements

Grant Opportunities
Ohio EPA announces 2017 mosquito control grant. Information can be found at http://www.epa.ohio.gov/dmwm/Home/ScrapTires.aspx

Educational Opportunities
April 6-7, 2017: Annual Education Conference
September 19-20, 2017: SE Fall Conference
October 4-5, 2017: SW Fall Conference
October 10-11, 2017: NE Fall Conference
October 12-13, 2017: NW Fall Conference

Open Positions (As posted after 1/1/17 to the OEHA website with an opening of at least 3/15/17 as of 2/27/17)

Miami County Public Health
Sanitarian/Sanitarian-in-Training

Richland Public Health
Sanitarian/Sanitarian-in-Training

Cuyahoga County Board of Health
2 Human Resource Generalist Positions

Public Health - Dayton & Montgomery County
Intern II

Union County Health Department
Environmental Health Intern (unpaid)

Ottawa County Health Department
Sanitarian-in-Training or Registered Sanitarian

Public Health - Dayton & Montgomery County
Sanitarian-in-Training/Registered Sanitarian

Public Health - Dayton & Montgomery County
Supervisor - Bureau of General Services

Cuyahoga County Board of Health
Student Environmental Worker - Vector Control Program

Cuyahoga County Board of Health
Student Environmental Worker - Water Quality Program

Legacy Health Services
Consultant Food Service Sanitarian

Promotions and New Positions:

Jeff Webb
Congratulations to Jeff Webb who recently became the Director of Environmental Health at Green County Public Health.

Gabe Jones
Congratulations to Gabe Jones who recently became the Health Commission for Champaign Health District.

Holly Hillyer
Congratulations to Holly Hillyer who recently received a promotion to Environmental Supervisor of the Land Management/Closer program at Ohio EPA, Central Office.

Retirements

Debbie Leopold
Congratulations to Debbie Leopold who, at 36 years at Greene County Public Health, retired. Thank you for your dedication to environmental public health.

We Remember

Jollis “Chick” C. Welcher - 1927-2016
Jollis served environmental public health for 40 years at Youngstown City Health Department.
PROFESSIONAL RECOGNITION OF PUBLIC HEALTH SANITARIANS IN OHIO

BY: A. H. Fishback, Sanitary Engineer
Ohio Department of Health

For several years, sanitarians in Ohio have expressed a desire to be professionally recognized, and several attempts have been made to have a State law enacted to require registration. Compulsory registration, so far, has been unsuccessful, and thoughts have turned to voluntary registration.

One of the purposes of registration is to gain professional recognition, but it should be realized that registration alone does not bring professional recognition.

We have professionalization now in medicine, engineering, nursing, dentistry, education, social work, and other fields. A profession is the occupation to which a person devotes himself, a calling in which he professes to have acquired some special knowledge used by way of instructing, guiding, or advising others, or of serving them in some art.

If the sanitarian's field of work is to be professionally recognized, there are certain prerequisites that must be met:

1. It must satisfy a social need, and must be based on well-established and socially accepted principles (we have this).

2. It must demand adequate professional and cultural training. (Do we recognize this need and are progressing towards meeting it, but can we say we have met it?)

3. It must demand the possession of specialized and systematized knowledge. (Do we have this?)

4. It must provide needed skills which the public does not have. (Can we provide this?)

5. It must have developed a scientific technique as a result of tested experience. (The techniques have been developed. All we have to do is apply them.)

6. It must exercise discretion and judgment as to time and manner of performance of duty. (This many of us will have to learn.)

7. It must be beneficial work. (There is no doubt about meeting this one.)

8. It must translate scientific knowledge to easily understandable language. (This we can do. I would not say that we have.)

9. It must not be merely a stepping stone to other occupations.

- 103 -
10. It must live up to a code of ethics. (This is tough, but we could do it.)

If the recognition of the sanitarian's field of work follows the trend of the evolution of other professions:

1. It first organizes to protect its members against unfair competition. (We have the organization in the Ohio Association of Public Health Sanitarians, but the majority of sanitarians in Ohio do not belong. This we must have if we are to present an organized front.) (Membership Committee please note.)

2. It improves relationship between individuals. (We are trying to do this through the State Association and its various committees.)

3. It establishes educational qualifications for admission. (Much effort has been expended on this problem, and apparently we are nearing some definite requirements.)

4. It will keep public needs above professional desires. (Do we or don't we?)

It is up to the sanitarians themselves if the necessary pre-requisites are met, and it is the job of each individual sanitarian—not something for the other fellow to do for us. Are you doing your share? Remember, if we want professional recognition, we can gain it only through better qualifying ourselves for our jobs and demonstrating to the public generally our ability to carry out successfully the responsibilities delegated to us.


---

**Legislative Updates**

OEHA monitors legislation related to public health closely. This is mainly done through our lobbyists at Hicks Partners. Our members are continually monitoring, reviewing and evaluating legislation. Representatives from Hicks Partners attend each of our board meetings and our Annual Education Conference. We value our relationship with Hicks Partners tremendously, and we look forward to working with them for many years to come.

- **2017 Ohio Executive Budget Bill**
  

- **House Bill 65- Regulate reviews of sanitarians who inspect restaurants**
  
Leader the Industry with Innovative Wastewater Treatment Solutions

Engineered For Performance

For more Information Contact Zak Sherman, Area Sales Representative
(888) 231-9791 • zsherman@infiltratorwater.com
www.infiltratorwater.com
OEHA Committees & Chairs

**Air Quality**
Sam Rubens - Akron Regional Air Quality Management District

**Campgrounds**
Eric Cherry, R.S. - Huron County Health Department

**Emergency Response**
Dustin Ratliff, MPH, REHS, R.S. - Warren County Combined Health District

**Environmental Sustainability**
Robert Hasenyager, MS, R.S. - Summit County Health Department

**Food**
Christina Ritchey Wilson, JD, R.S. - Columbus Public Health

**Healthy Homes**
Christine Stelzer, R.S. - Erie County Health Department

**Lead**
Joshua A. Niese, R.S. - Toledo - Lucas County Health Department

**Materials and Waste Management**
Chuck De Jonckheere, R.S. - Hamilton County Public Health

**Rabies**
Brandon Atwood, SIT - Fairfield Department of Health

**School Environments**
Greg Chumney, R.S. - Licking County Health Department

**Sewage**
Laura Kramer Kuns, R.S., REHS - Kramer Kuns Consulting, LLC

**Shale Gas Extraction**
Sam Rubens - Summit County Public Health

**Swimming Pools/Spas**
Barry Grisez, R.S. - Cuyahoga County Board of Health

**Vector Control**
Scott Pozna, R.S. - Lorain County Health Department

**Archives**
Melissa Adams, R.S. - Delaware General Health District

**Constitution & By-laws**
Ken Sharkey, R.S. - Ottawa County Health Department

**Exhibits**
Shannon Self, R.S. - Delaware General Health District

**Professional Development**
Chad Brown, R.S., MPH - Licking County Health Department

**Resolutions**
Jennifer Wentzel, R.S. - Public Health - Dayton & Montgomery County

**Website**
Garrett Guillozet, R.S., REHS, AEMT - Franklin County Public Health

**Awards & Recognition**
Gus Dria, R.S. - Canton City Health Department

**Auditing**
Robert Hasenyager, MS, R.S. - Summit County Health Department

**Finance**
Chad Brown, R.S., MPH - Licking County Health Department

**George Eagle Scholarship**
Joe Ebel, R.S. - Licking County Health Department

**Membership**
Adam R. Howard, R.S., REHS - Delaware General Health District

**Nominations & Elections**
Josh Niese, R.S. - Toledo - Lucas County Health Department

**Public Affairs**
Stephan Ruckman, MPH, R.S. - Worthington Schools

**Tellers**
Joe Weaver, R.S. - MASI Environmental Labs

**Training Scholarships**
Joe Harrod, R.S. - Columbus Public Health

**Concentrated Animal Feed Facility**
Jason Menchhofer, R.S. - Mercer County Celina City Health Department

**Private Water Systems Advisory Council**
Randy Ruszkowski, R.S. - Stark County Health Department

**Ohio Public Health Partnership**
Rob Perry, R.S. - Clermont County General Health District

**Ohio Voluntary Accreditation Team**
Rob Perry, R.S. - Clermont County General Health District