

# GeoNews

Newsletter of the Association of Environmental & Engineering Geologists,  
Carolinās Chapter 2009, 2011, 2013, 2016, and 2017 AEG Chapter of the Year

WINTER 2017



## IN THIS ISSUE

Emerald Hollow Mine Trip .....	8
Education News and Accolades .....	11
Summary of VI: The Conference II .....	18

## SAVE THE DATE

January 25, 2018 AEG Carolinas Winter Meeting Draught, Charlotte
March 9-10, 2018 AEG & USC Spring Meeting & Field Trip Columbia, SC

**GEONEWS WINTER 2017****Issue Date: December 22, 2017****TABLE OF CONTENTS****Articles and Reports**

Emerald Hollow Mine Trip Summary <i>by Sue Buchanan</i> .....	8
Summary of VI: The Conference II <i>by Rick Kolb</i> .....	18
Past Chair Perspective <i>by Jay Bennet</i> .....	20

**Columns and Regular Features**

Message from the Chair <i>by Madeline German</i> .....	3
Education: NC Science Teachers Association .....	11
Education: Some Love for AEG Carolinas .....	14

**Board Business**

10-11-17 Meeting Minutes <i>by Jennifer Thomas</i> .....	22
--	----

**Forms and Flyers**

Winter Meeting Announcement .....	6
Spring Field Trip .....	9
Calendar of Events .....	25
AEG Membership Application .....	28
Sponsor Application .....	29

**Thanks to our Sponsors!**

**GeoNews** is a publication of the Carolinas Chapter of AEG. There are four issues per year, with deadlines and issue publication dates listed below. We publish news of the profession, announcements, student member news, technical articles, and job openings.

**Deadlines for submittal to AE Carolinas GeoNews**

(can be flexible depending on events)

Spring—deadline March 1, issue date March 21  
 Summer—deadline June 1, issue date June 21  
 Fall—deadline Sept 1, issue date Sept 21  
 Winter—deadline Dec 1, issue date Dec 21

**Deadlines for submittal for the National AEG News:**

March issue—January 15  
 June issue—April 15  
 September issue—July 15  
 December issue—October 15

**AEG Carolinas Chapter****Current Officers and Contacts**

Chair	Madeline German, P.G. <a href="mailto:madeline@smithgardnerinc.com">madeline@smithgardnerinc.com</a>
Vice Chair	Susan Avritt, P.E., L.G. <a href="mailto:Susan.kelly@amecfw.com">Susan.kelly@amecfw.com</a>
Treasurer	Walt Plekan, P.G. <a href="mailto:Walt.plekan@aecom.com">Walt.plekan@aecom.com</a>
Secretary	Jennifer B. Thomas, P.G. <a href="mailto:jen@jennotecllc.com">jen@jennotecllc.com</a>
Membership Chair	Anthony Hermann <a href="mailto:Anthony.herrmann@hrpassociates.com">Anthony.herrmann@hrpassociates.com</a>
Student Liaison	Rick Kolb, P.G. <a href="mailto:Rick.kolb1@gmail.com">Rick.kolb1@gmail.com</a>
Social Media Co-Chairs	Joanna Harbison <a href="mailto:jharbison@shieldengineering.com">jharbison@shieldengineering.com</a> Rohit Warrior <a href="mailto:rwarrior@geosyntec.com">rwarrior@geosyntec.com</a>
Social Committee Chair	Adam Phillips <a href="mailto:aphillips@prismlabs.com">aphillips@prismlabs.com</a>
Field Trip Chair	Susan Buchanan, P.G. <a href="mailto:sbuchanan@schnabel-eng.com">sbuchanan@schnabel-eng.com</a>
Section Sponsor Co-Chairs	Eric Cross, P.G. <a href="mailto:eric@pyramidenvironmental.com">eric@pyramidenvironmental.com</a> Rebecca Deal <a href="mailto:RDeal@harthickman.com">RDeal@harthickman.com</a>
GeoNews Editor	Joshua Hanks, P.G. <a href="mailto:josh@dunckleedunham.com">josh@dunckleedunham.com</a>
Advisor	Jennifer Bauer, P.G. <a href="mailto:jennbbauer@gmail.com">jennbbauer@gmail.com</a>
Advisor	Gary Rogers, P.G. <a href="mailto:grogers@schnabel-eng.com">grogers@schnabel-eng.com</a>

**Regional Director/Past Chair** Paul Weaver, P.G.  
[pweaver@espassociates.com](mailto:pweaver@espassociates.com)

**AEG Carolinas Chapter Website** [www.aegcarolinas.org](http://www.aegcarolinas.org)

**AEG National Website** [www.aegweb.org](http://www.aegweb.org)

**Cover:** Photo of Jane Gill-Shaler attending the AEG booth at the NCSTA Conference

**Disclaimer:** © 2017 Association of Environmental & Engineering Geologists—All Rights Reserved. Views expressed in this publication are not necessarily those officially representing the Association of Environmental & Engineering Geologists except where expressly stated.

## MESSAGE FROM THE CHAIR

*By Madeline German, P.G., Carolinas Chapter Chair*

Greetings Carolinas Chapter!

AEG Carolinas wrapped our 40<sup>th</sup> anniversary year with the same vigor and enthusiasm as we started. We had our 40<sup>th</sup> Anniversary Dinner meeting in Greensboro, the town where the Carolinas Chapter (then section) was founded. On Thursday, October 22<sup>nd</sup> **Cyrus Parker** with NCDOT presented “Greenville’s Tenth Street Connector and the Environmental Challenges of an Urban Transportation Project”. There were approximately 60 regulators, professionals and students in attendance. **SAEDACCO** and **Eastern Solutions** set up tables as exhibitors and provided one drink ticket per paid registration.

Also at this meeting a 50/50 raffle was held to raise money for the Carolinas Scholarship fund. \$150 was raised at the meeting because the raffle winner (**Sue Buchanan**) generously donated her winnings to the scholarship fund.

The fall field trip to the **Emerald Hollow Mine in Hiddenite, North Carolina** on Saturday, October 21, 2017 was an overwhelming success. This was the first field trip we were forced to create a waiting list because there was so much interest. Look for this trip to come back around. The Emerald Hollow Mine in Hiddenite, NC, is the only emerald mine in the United States open to the public for prospecting. The mine has been in business since 1986, there are no caves or tunnels at the mine; all mining is done vertically by digging down into the ground or using sluice buckets filled with dirt.

In addition to the mine, the property has two streams that can be panned, sluicing stations, and a lapidary shop, where gemstones are cleaned, cut on site, and made into jewelry. AEG members spent the day searching and finding emeralds and participated in an educational program that included an earth science lesson, creeking (a crowd favorite), sluicing, and surface collecting. Both NC and SC Continuing Education Credits were awarded to attendees.

On October 5<sup>th</sup> and 6<sup>th</sup> we hosted **Vapor Intrusion: The Conference II** in Charlotte. We had 182 registrants (55 from the public sector), 26 speakers, 18 exhibitors, 4 sponsors, 8 planners, and 4 student volunteers from UNC-Charlotte attend to learn the latest technical, regulatory and legal perspectives on VI. **AEG President Greg Hemen** came to Charlotte for the conference and also found time to stop by UNCC to speak with the geology students. The VI Conference provided 12 hours of continuing education credits, which fulfills the yearly requirement for geologists registered in North Carolina. The presenters have graciously allowed us to release their presentations. We have converted the presentations from Power-Point files to .pdf files and saved them in a Dropbox at:

<https://www.dropbox.com/sh/no0f3qkzaix6iji/AADMmuAjl6jcDK9qwXPbSmzUa?dl=0>

*(Continued on Page 4)*



W. Martin M. Johnson, P.G.  
Vice President

Two United Way  
Greenville, South Carolina 29607  
[www.aedrilling.com](http://www.aedrilling.com)

Phone: (854) 288-1986  
Fax: (854) 288-2272  
Cell: (828) 674-9494  
[mjohnson@aedrilling.com](mailto:mjohnson@aedrilling.com)



(Continued from Page 3)

On deck for 2018 we will begin the year in Charlotte, NC for the January 25<sup>th</sup> dinner meeting at Draught. Dr. Kevin Finneran, Associate Professor of environmental engineering at Clemson University and owner of Finneran Environmental, LLC, will be presenting “Combined microbial-chemical redox reactions for Cr(VI) transformation”. In his talk, he will discuss how Cr(VI) bioremediation has generally been predicated on stimulating strictly microbial reactions, in which the cells must directly interact with the contaminant(s) to transform it. While this can be effective and efficient, there are times when direct cellular interactions are slow, incomplete, or completely impossible. Kevin will present new approaches in this technology including electron transfer via activated carbon, with both laboratory and field examples.

In February the 2017-2018 Jahns Distinguished Lecturer Dr. John Wakabayashi, P.G., will visit schools across North and South Carolina; details will be updated on the [aegcarolinas.org](http://aegcarolinas.org) website.

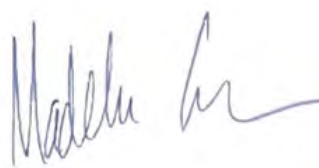
The spring 2018 field trip will be **Dam Failures during the historic October 2015 Flood in South Carolina**, hosted by the University of South Carolina, AEG, and ASCE, in Columbia, South Carolina. We will be having a dinner meeting on Friday March 9<sup>th</sup> at USC with the all-day field trip Saturday March 10<sup>th</sup>.

The field trip will include two or three locations that were impaired during flooding including the Old Mill Dam, an earthen dam located in

Lexington County, which was one of the largest dams destroyed during the flooding, with a breach depth over 7 meters; and Lake Elizabeth, located in Richland County. Further details concerning dam locations for this field trip and others from this flood can be found in; “Embankment Failures during the Historic 2015 October Flood, South Carolina: Case Study” (2016) in the Journal of Hydraulic Engineering.

As we bring the amazing adventures of 2017, our 40<sup>th</sup> anniversary year, to a close; it is a good time to pause and reflect on the great people, beautiful and interesting locations and thought-provoking problems with creative solutions we as geologists are privileged to experience as part of our everyday life. Thank you all for your hard work and dedication to AEG in the 2017 year. I am looking forward to seeing and working with you in 2018.

As always, your board and I look forward to hearing from each of you regarding your suggestions and/or concerns related to our Chapter. We are here to serve the needs of our membership, so your feedback is vital and welcome.




Maddie German, PG

[madeline@smithgardnerinc.com](mailto:madeline@smithgardnerinc.com)

AEG Carolinas Chapter Chair



**CLEAN VAPOR LLC**  
V.O.C. & RADON PLAN DESIGN AND REMEDIATION

**Thomas E. Hatton**  
CEO - PROJECT DIRECTOR

VOICE 908.362.5616 / FAX 908.362.5433 / CELL 973.479.7068  
[thatton@cleanvapor.com](mailto:thatton@cleanvapor.com)

32 LAMBERT ROAD, PO BOX 688, BLAIRSTOWN, NJ 07825 / [cleanvapor.com](http://cleanvapor.com)



**SHAMROCK**  
ENVIRONMENTAL CORPORATION

[www.shamrockenviro.com](http://www.shamrockenviro.com)

**Rick Wigal**  
Business Development Manager

6106 Corporate Park Drive, Browns Summit, NC 27214  
336-375-1989 • 800-881-1098 • Fax 336-375-1801  
Mobile 336-558-5446  
[rwigal@shamrockenviro.com](mailto:rwigal@shamrockenviro.com)





# Enviro-Equipment, Inc.

***"When it has to work"***

1-888-274-8929 [www.enviroequipment.com](http://www.enviroequipment.com)

## WE BUILD THESE...

### Our Instrument Division Includes:

- Rental instruments and accessories
- Instruments for purchase
- Instrument repair
- Field sampling supplies
- Personal Protective Equipment (PPE) supplies
- Equipment Training

### Our Remediation Division Includes:

- Soil and groundwater remediation equipment
- Remediation rental equipment
- New and used remediation systems for sale
- Pilot testing equipment and support
- Remediation components and parts for sale
- Custom electrical control panels
- Field installation and startup service
- Field repair of remediation systems
- Bulk carbon sales and change-out services
- Carbon injection services



## WE RENT THESE...



**...AND SO  
MUCH  
MORE!**

**Call or visit our website today!**

EEI is a North Carolina certified "Woman-Owned Business Enterprise" incorporated in January, 1993, and is located at 11180 Downs Road in Pineville, NC 28134. In 2004, EEI opened a 10,000 sqft Remediation System Division at 10120 Industrial Drive in



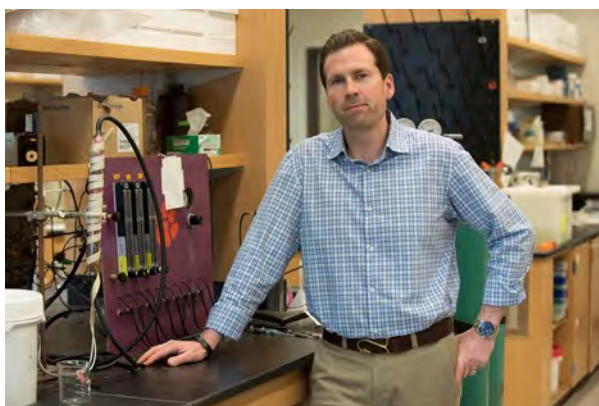
**Dinner Meeting**  
*The Carolinas Chapter of the  
Association of Environmental & Engineering Geologists*

Guest Speaker:

*Dr. Kevin T. Finneran*

*Associate Professor, Clemson University Environmental Engineering*

*Owner and Principal, Finneran Environmental, LLC*



Presentation:

**Combined microbial-chemical redox reactions for Cr(VI) transformation**

Dinner and Talk: 5:30-9:00 PM on Thursday, January 25, 2018

Draught Restaurant and Bar

601 S Cedar Street

Charlotte, North Carolina 28202

**Meeting Details**

**Place:** Draught Charlotte

**Date:** Thursday, January 25, 2018

**Time:** 5:30 PM socializing begins, 7:00 buffet dinner, 8:00 talk

**Cost:** AEG members \$30, non-members \$40, public-sector employees \$15, teachers \$10, students **free** with college ID

**Reservations:** Please make reservations with Jenn Thomas by 6:00 PM on Thursday, January 18, 2018

email: [jen@jennotecllc.com](mailto:jen@jennotecllc.com)

### Presentation Abstract

Cr(VI) bioremediation has generally been predicated on stimulating strictly microbial reactions, in which the cells must directly interact with the contaminant(s) to transform it. While this can be effective and efficient, there are times when direct cellular interactions are slow, incomplete, or completely impossible. We have been investigating combined microbial-chemical reactions for both organic and inorganic contaminants, and how to best promote different microbial populations for increasing the rate and extent of attenuation. One effective approach has been microbially mediated reactions, which promote secondary chemical reactions that transform contaminants of concern. This has been particularly effective with metals and metalloids, and Cr(VI) in particular. The cells reduce electron acceptors including Fe(III) or reducible natural organic matter (humic substances), and the reduced Fe(II) or humic material chemically transfers electrons to Cr(VI). This process has been referred to as extracellular electron shuttling, but in reality, is more of an understanding of how electron transfer takes place within contaminated water/solid environments.

We will discuss new approaches in this technology including electron transfer via activated carbon. An alternative approach is when chemical treatment precedes microbial treatment, such as when chemical oxidants or reductants are applied for contaminant transformation, and microbial activity is then promoted to degrade residual contamination.

Laboratory and field data will be presented.

### Presenter Résumé

Bio: Kevin T. Finneran, Ph.D., Associate Professor, Department of Environmental Engineering and Earth Sciences,  
Department of Microbiology, Clemson University

Kevin is an associate professor of environmental engineering at Clemson University; he received his Ph.D. in microbiology in 2001 at the University of Massachusetts at Amherst. He has been a professor at the University of Illinois Urbana Champaign, and a consultant at Geosyntec. His expertise is environmental remediation using microbial and chemical reactions. He is a Kavli Fellow of the National Academy of Sciences (NAS), which recognizes young researchers considered experts in their field. He owns and operates Finneran Environmental, LLC, which support clients on the most difficult or problematic environmental remediation projects.



Research/Academic Web Page: [www.clemsonbioremediation.com](http://www.clemsonbioremediation.com)



Consulting Web Page: [www.finneranenvironmental.com](http://www.finneranenvironmental.com)

## Emerald Hollow Mine Field Trip Summary

*By Sue Buchanan, Field Trip Chair*



Sluicing at Emerald Hollow Mine. Use a sieve and brush to sift through soil dug up from the Wallace Creek to Collect rare minerals.

area to locate minerals. The rare minerals are located in altered zones along the periphery of the quartz-muscovite veins. The main trend of the veins is northeast-southwest. You can either dig to find minerals or you can go creeking – which was a lot of fun. The mine offers small shovels and sieves which you can use to sort through the sand and gravel of the Wallace Creek. Here my geo-friends and I found some good pieces of minerals like amethyst, rutile, emerald, smoky quartz, and sapphire.

If you would like to experience Emerald Hollow Mine for yourself, it is open to the public every day, rain or shine (except for fall/winter holidays) from 8:30am to sunset. They also have a beautiful collection of hand-crafted jewelry from gemstones found at the mine at their Lapidary Shop! Check out their website at <http://www.emeraldhollowmine.com/>.

Our next AEG field trip is to the University of South Carolina in Columbia where we will visit their geotechnical laboratory and learn about the impacts of the 2015 floods on earthen embankment dams within the Midlands of South Carolina. We will have a Friday meeting on March 9th at USC followed by a Saturday field trip on March 10th. Visit the AEG Carolinas website at <http://aegcarolinas.org/> for more information about this upcoming field trip.

A fun group of about 50 AEG members, non-members, and students were gem-seekers for a day at Emerald Hollow Mine in Hiddenite, NC, with help from the host of the trip, Emerald Hollow Mine geologists Issac “Drew” Ervin and Mike Watkins. Many people took home some good finds: minerals, rocks, and a want to come back to find more!

The day started with finding gemstones in the sluice and here Drew Ervin taught us the history of the Emerald Hollow Mine. It all started in the mid-1880s by a mineralogist William Hidden, who was sent by Thomas Edison to explore this area for platinum needed for coating the wire filaments in electric light bulbs. Hidden did not find any platinum, but did discover a fault line where emeralds and sapphires were found near quartz-muscovite-rich veins. This is where Hidden discovered a neon-green spodumene and named it hiddenite. Rare specimens of hiddenite have been found at Emerald Hollow Mine, and you can see some in the Lapidary Shop at the mine.

Next, Drew Ervin gave us a general geology lesson with tectonic history about the Hiddenite area, followed by a walk into the woods where we located a quartz-muscovite vein and tried digging in the



Smart rutile minerals found at Emerald Hollow Mine. Even rutile knows the ABCs.





## ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS—Carolinas Chapter

---

### Save the Date for the Spring Meeting and Field Trip 2018

Hosted by the University of South Carolina and AEG Carolinas Chapter  
Dam Failures during the historic October 2015 Flood in South Carolina

**Meeting: Friday, March 9th and Field Trip: Saturday, March 10th, 2018**

**Friday Meeting:** Carolina Room in the Capstone Conference Center of USC

**Address:** 902 Barnwell Street, Capstone Hall, Columbia, SC

**Presentation by:** Dr. Lindsey LaRocque (USC) and Dr. Ali Tabrizi (Schnabel Engineering)

**Presentation Title:** Dam related studies at the University of South Carolina

**Time:** 6:00pm to 9:00 pm, with one hour social, one hour dinner, and one hour presentation

**Cost:** AEG Members \$30, Non-members \$40, Public Sector \$15, Teachers \$10, Students Free

**South Carolina Continuing Education Credits:** 1 credit

**North Carolina Continuing Education Credits:** 1 credit

**Saturday Field Trip:** Meet at Hydraulics Lab, Civil Engineering Department, University of South Carolina

**Address:** 300 Main Street, Columbia, SC

**Cost:** TBA

**South Carolina Continuing Education Credits:** TBA

**North Carolina Continuing Education Credits:** TBA

### Summary of Field Trip:

The site visits will be led by Dr. Ali Tabrizi and Dr. Lindsey LaRocque. While conducting research at the University of South Carolina, they investigated over 20 impaired dams, following the historic flooding in the Midlands of South Carolina in October of 2015. The site visit will include 2-3 locations that were impaired during flooding. Old Mill Dam is an earthen dam located in Lexington County and is no longer impounding any water. Old Mill was one of the largest dams destroyed during the flooding, with a breach depth over 7 m. Another dam location that we will be visiting is Lake Elizabeth, located in Richland County. Prior to the storm, Lake Elizabeth dam had a roadway over the top, and remains in disrepair. This is the case for many of the impaired dams following the storms. Another potential site visit location is the Gibson Pond Dam, located in Lexington County. Further details concerning each dam location can be found in: "Embankment Failures during the Historic 2015 October Flood, South Carolina: Case Study" (2016) in the Journal of Hydraulic Engineering.



ESP Associates, P.A.

## Geophysical Services

- Locate abandoned USTs
- Map depth to bedrock
- Designate seismic Site Class
- Map subsurface voids
- Characterize bedrock fractures
- Delineate buried waste
- Many other applications....

Ned Billington, PG, 336-232-5211

[geophysics@espassociates.com](mailto:geophysics@espassociates.com)

[www.espassociates.com](http://www.espassociates.com)



**Paul Konnik**  
Regional Sales Manager - Southeast

Laboratory:  
39 Spruce Street  
East Longmeadow, MA 01028  
413.525.2332  
Fax: 413.525.6405

Raleigh, NC Service Center  
6104 Westgate Road  
Suite 129  
Raleigh, NC 27617

Cell: 314.302.0431  
[paul.konnik@contestlabs.com](mailto:paul.konnik@contestlabs.com)  
[www.contestlabs.com](http://www.contestlabs.com)



## SAEDACCO

SAEDACCO is using its Roto-Sonic drill to conduct Groundwater Interval Profile Sampling. This in-situ sampling system is used in sedimentary aquifers with a two inch stainless steel screen, inflatable packer and a Grundfos Redi-Flo pump to collect discrete formation samples at a rapid pace during the drilling process. This system assists the client in determining the vertical extent of contamination in aquifers without having to install multiple monitoring wells. Cost savings, innovative ideas! Let us know how we can help you on your next project.



**Innovative Solutions:**  
Groundwater Interval Profile  
Sampling Using Roto Sonic Drilling

**SAEDACCO, Inc.**

9088 Northfield Dr. Fort Mill, SC 29707  
800.849.0353 / [www.saedacco.com](http://www.saedacco.com)

**Your one source for DPT, roto sonic,  
conventional drilling, injection and  
remediation services.**

## EDUCATION

## Education News

*By Randy Bechtel, North Carolina Geological Survey*

**2017 North Carolina Science Teachers Association Professional Development Institute (NCSTA-PDI)**AEG Support of the Outstanding Earth Science Teacher (OEST) and Educator (OESE) award winners

The 2017 North Carolina OEST winner is Annette Bartlett from Harris Road Middle School in Cabarrus County. Annette was also chosen, from among other state winners in the Southeastern Section of the National Association of Geoscience Teachers (NAGT), as the Southeastern Section winner of the OEST award. This is the second year in a row that the N.C. OEST winner made it to the highest level of this program by winning the section-wide award. Bartlett said, *“As a teacher, it is nice to be recognized for all the hard work, I put into my classroom so the students can have a Global Project Based Learning Environment which will allow them to see how Earth Science connects to the world.”*

The 2017 North Carolina OESE winner is Jennifer Brooks from the Durham County Soil and Water Conservation District. Thanks to the Board for the additional support of the OESE award this year. The additional funding was much appreciated and permitted the two award packages to remain equal. Brooks said *“As an Earth Science Educator, and like all others in this field, I do this job because of a passion to connect people with nature, not for prizes and awards. But when one is recognized for their hard work and dedication with an honor such as this one, it gives validation that what you do is appreciated and celebrated. Thank you for providing such recognition and opportunities to me and all Earth Science Educators throughout the state of North Carolina.”*



Left-right: 2017 N.C. OESE winner Jennifer Brooks; 2017 N.C. and Southeastern Section OEST winner Anette Bartlett.

AEG grant to support teachers attending the NCSTA-PDI

For the first time, the Carolinas Chapter offered grants to assist teachers in attending the N.C. Science Teachers Association Professional Development Institute (NCSTA PDI). This is the annual statewide professional development institute specifically for science teachers. The grants provided registration for three teachers to attend the PDI. Three teachers were competitively chosen from fifteen applicants to receive a grant.

The three grant recipients all teach the high-school Earth/Environmental Science course in addition to classes in other sciences. Two of the grantees, Lia Biscardi a second-year teacher at South Central High School in Pitt County, and Chase Smith an early career teacher at Pisgah High School in Haywood County, were first-time attendees at the NCSTA PDI.

*(Continued on Page 12)*



## EDUCATION

*(Continued from Page 11)*

The third grantee, Mark Case, is an experienced teacher serving Title I (socioeconomically depressed) students at Southern Guilford High School, in Guilford County. The three grantees geographically represent the entire state from the mountains to the sea.

The three grantees sent thank you letters to the Board Members of the Carolinas Chapter, here are excerpts:

Biscardi wrote:

*"I cannot thank you or your chapter enough for allowing me to attend the NCSTA conference. It was my first NCSTA conference and I truly enjoyed my experience. You allowed me to expand my knowledge of vocabulary strategies and advancing my career by networking with other professionals. I hope everyone can receive this generosity and appreciate the value of continuous education for educators. It is a blessing to have an organization support our educators and appreciate what we would like to do to help our students."*

Smith wrote:

*"Thank you so much for the opportunity to attend the NC Science Teachers Association Professional Development Institute last month! Your support allowed me to take part in this event when I otherwise would not have made it. I am a third-year science teacher at Pisgah High School in Haywood County. This was my first time attending the conference, and I was thrilled to connect with so many colleagues from across the state and learn so much from the events. I normally teach chemistry and physics, but this spring I'll have 2 sections of earth/environmental science [EES], so this allowed me the opportunity to plan ahead and get some great resources to be better prepared to give EES my best."*

Case wrote:

*"My attendance also allowed me to meet with educators from elementary to high school and network how to include geology in every aspect of science. It does not have to be solely taught in earth science. Geology is included in every part of our lives. Making those connections for educators was inspirational."*



*Left to right: AEG grantees, Mark Case and Lia Biscardi, attending the 2017 NCSTA-PDI.*



*AEG grantee, Chase Smith, attending the 2017 NCSTA-PDI.*

## EDUCATION

### Thank You from Randy Bechtel

As the N.C. Geological Survey Education Geologist, I would like to thank the AEG Carolinas Chapter for its continuing sponsorship and support of the N.C. Outstanding Earth Science Teacher (OEST) award, the N.C. Outstanding Earth Science Educator (OESE) award, and for the additional support of the OESE award this year. I would also like to thank the Chapter for offering grants to assist teachers in attending the N.C. Science Teachers Association Professional Development Institute (NCSTA PDI). Teachers and Educators face many challenges and the support of the Carolina's Chapter, as you can see from the quotes above, is really appreciated.

### 2018 Combined National AND North Carolina Science Teachers Association Area Conference

Different date and location this year!

[www.nsta.org/conferences](http://www.nsta.org/conferences)

a. The National Science Teachers Association (NSTA) holds Area Conferences each year which combine the national and a state science teacher's associations. The Area Conferences rotate through states in a region and every 5 years the NSTA combines with the North Carolina Science Teachers Association (NCSTA) in Charlotte, N.C.

b. The combined NSTA-NCSTA Area Conference will be held Thursday, November 29 - Saturday December 1, 2018 in Charlotte.

c. This conference usually attracts thousands of teachers from North Carolina, the Southeast and from across the country.

More details to come.

**The North Carolina Science Festival (NCSF)** The entire month of April 2018! [www.ncsciencefestival.org](http://www.ncsciencefestival.org)

a. The 2018 NC Science Festival is going to be bigger than ever before, now with a full month of science from April 1<sup>st</sup> - 30<sup>th</sup>! If you want to promote the geosciences yourself, or if your company wants to do outreach, this is a great opportunity. Here are some links to get you started [www.ncsciencefestival.org/opportunities-scientists](http://www.ncsciencefestival.org/opportunities-scientists) and [www.ncsciencefestival.org/host-event](http://www.ncsciencefestival.org/host-event). The theme for the 2018 Festival is the "science of food and drink." Not all events need to adhere to the theme. Organizations looking for event ideas or interested in proposing an event can contact [ncscifest@unc.edu](mailto:ncscifest@unc.edu) to consult with Festival staff.

b. As the N.C. Geological Survey Education Geologist, I can also provide some insight into this event and the process. An "event" can be as big or small as you like. I have presented an all-ages building stone tour of downtown Raleigh (The Rockin' Walkin' Tour) each year for this event. An individual can do a classroom presentation; a company can give a tour of a lab, site, or facilities; or you can volunteer for an event to see what it is all about. The Festival Staff [ncscifest@unc.edu](mailto:ncscifest@unc.edu) can also assist you with ideas about how you can participate. This is a great opportunity to promote the geosciences! And your company!

c. From the NCSF website: *"The Festival, a celebration of science, technology, engineering and math (STEM) and its impact on North Carolina, is the largest science festival in the nation and the first to encompass an entire state. In 2017, the two-week long Science Festival had a presence in all 100 N.C. counties! The NCSF had 240,139 participants and 850 events at schools, museums, community centers, libraries, parks and other venues. Two astronauts, 5,218 volunteers and 2,743 STEM professionals contributed to its success."*

**EDUCATION****Some Love for AEG Carolinas!****Thank You Note from Chase Smith**

Thank you so much for your generous gift to allow me to attend the NCSTA conference. It is rewarding for both me and my students.

Thanks so much!

Chase Smith

**Thank You from Lia Biscardi**

Hello Ms. German,

My name is Lia Biscardi and I am one of the recipients of the grants provided by the Association of Environmental & Engineering Geologists (AEG), Carolinas Chapter to attend the NCSTA conference in Greensboro.

I cannot thank you or your chapter enough for allowing me to attend the NCSTA conference. It was my first NCSTA conference and I truly enjoyed my experience. You allowed me to expand my knowledge of vocabulary strategies and advancing my career by networking with other professionals.

I have already used many of the strategies that were presented to me at the conference and I have received good feedback from my PLCs and administrators. I will eventually present this information to my department so I can spread the joy.

I hope everyone can receive this generosity and appreciate the value of continuous education for educators. It is a blessing to have an organization support our educators and appreciate what we would like to do to help our students.

Thank you again,

Lia Biscardi

**Thank You from Mark Case**

Dear Ms. German,

I want to say thank you to the AEG for the grant to attend the North Carolina Science Teacher Association annual meeting in October. I am a high school science teacher from Guilford County schools. Without the grant, two very important things would not have occurred during the meeting.

First, my co-teachers and I developed a new linked activity between soil type, rock strata and flora and fauna biome indicators. The lesson was a huge hit and could be scaffolded from elementary to high school.

The second was meeting the members of the Burrows Welcome Fund. Our school has applied for a grant for several years and has never made it past the first reading. The members at the booth remember our grant applications and took over an hour to help us re-write the grant.

My attendance also allowed me to meet with educators from elementary to high school and network how to include geology in every aspect of science. It does not have to be solely taught in earth science. Geology is included in every part of our lives. Making those connections for educators was inspirational.

My attendance may not have directly improved my classroom teaching but you allowed me to have an important impact on others. Thank you.

Mark Case

The advertisement is split into two vertical panels. The left panel shows a book cover with the title "Stop Guessing... Know What's Down Inside Your Well" in a stylized font. Below the title, it lists services: "Water well video, analysis, and repair" and "Geophysical Surveys". The right panel has a light blue background and contains the text "EGIS, PA" in a large, bold, serif font. Below this, it provides the name "Mike L. Vaught, PG, CWC" and contact details: "(919)929-8363", "441 Northside Dr.", "Chapel Hill, NC 27516", and the email "gwinvest@juno.com".



**EDUCATION****Support for National Association of Geoscience Teacher**

Maddie,

I wanted to send you a thank you for supporting the National Association of Geoscience Teachers. I received the award for Outstanding Earth Science Teacher for North Carolina and The Southeastern Region. As a teacher, it is nice to be recognized for all the hard work I put into my classroom so the students can have a Global Project Based Learning Environment which will allow them to see how Earth Science connects to the world.

Thank You Again for your support.  
Elizabeth Annette Bartlett

**NC Outstanding Earth Science Educator Award**

Dear Ms. German,

I want to express my sincerest thanks to you for sponsoring the North Carolina Outstanding Earth Science Educator Award. I am truly humbled and honored to be the recipient of the award this year.

As an Earth Science Educator, I like all others in this field, do this job because of a passion to connect people with nature, not for prizes and awards. But when one is recognized for their hard work and dedication with an honor such as this one, it gives validation that what you do is appreciated and celebrated. Thank you for providing such recognition and opportunities to me and all Earth Science Educators throughout the state of North Carolina.

It is so wonderful that you are able to sponsor this contest and I hope you will consider doing so in years to come. It was a great opportunity for me, and I'm sure other educators will benefit from the award as much as I have. If you would, please extend my thanks to the entire Carolina Chapter. I hope that someday I will be able to be as generous as they are.

Gratefully,  
Jennifer Brooks

**Thank you for the support of NC Earth Science Teachers**

Dear AEG Carolinas Chapter Chair-Maddie German, Vice Chair-Susan Avritt, and other Board Members,

Thank you for the AEG Carolinas Chapter's continuing sponsorship of the N.C. Outstanding Earth Science Teacher (OEST) award, the N.C. Outstanding Earth Science Educator (OESE) award, and for the additional support of the OESE award this year. It was much appreciated and permitted the two award packages to remain equal. The 2017 N.C. OEST winner is Annette Bartlett from Harris Road Middle School in Cabarrus County. Annette was also chosen, from among other state winners in the Southeastern Section of the National Association of Geoscience Teachers (NAGT), as the Southeastern Section winner of the OEST award. This is the second year in a row that the N.C. OEST winner made it to the highest level of this program by winning the section-wide award. The 2017 N.C. OESE winner is Jennifer Brooks from the Durham County Soil and Water Conservation District.

I would also like to thank the Chapter for offering grants to assist teachers in attending the N.C. Science Teachers Association Professional Development Institute (NCSTA PDI). Fifteen teachers applied for the three grants. The three grantees chosen to receive the grants all teach the high-school Earth Environmental Science course in addition to classes in other sciences. Two of the grantees, Lisa Biscardi, a second-year teacher at South Central High School in Pitt County, and Chase Smith, an early career teacher at Pisgah High School in Haywood County, were first-time attendees at the NCSTA PDI. The third grantee, Mark Case, is an experienced teacher serving Title I (socioeconomically depressed) students at Southern Guilford High School, in Guilford County.

I ask the Chapter to consider continuing and possibly expanding the grant program. When teachers are able to demonstrate to their Administration that they have obtained outside support, they can make a stronger case to the Administration for school support to attend the NCSTA PDI.

*(Continued on Page 16)*

## EDUCATION

*(Continued from Page 15)*

I know all five teachers appreciated the support provided by the AEG Carolinas Chapter. Thank you for your continued interest and support of earth science teachers across the state.

Sincerely,  
Randy Bechtel

### Follow Up Thank You!

Maddie German and the Carolinas Chapter of the AEG,

Thank you so much for the opportunity to attend the NC Science Teachers Association Professional Development Institute last month! Your support allowed me to take part in this event when I otherwise would not have made it.

I am a third-year science teacher at Pisgah High School in Haywood County. This was my first time attending the conference, and I was thrilled to connect with so many colleagues from across the state and learn so much from the events. I normally teach chemistry and physics, but this spring I'll have 2 sections of earth/environmental science, so this allowed me the opportunity to plan ahead and get some great resources to be better prepared to give EES my best.

thanks for all you do!  
Chase Smith



**CCI**

**ENVIRONMENTAL SERVICES**

**24-HR. EMERGENCY**  
**1-888-624-6555**  
**www.cci-env.com**

**MARK VESTAL**  
PRESIDENT

P.O. BOX 64399  
FAYETTEVILLE, NC 28306

3434 BLACK AND DECKER ROAD  
HOPE MILLS, NC 28348

OFFICE: (910) 484-7000  
FAX: (910) 484-4978  
MOBILE: (910) 322-5000  
mark.vestal@cci-env.com

*Focused on the future, built on tradition...*

*... committed to excellence*



**Taylor Wiseman & Taylor**

ENGINEERS | SURVEYORS | SCIENTISTS

- Land Surveying
- Subsurface Utility Engineering
- Civil Engineering

Serving the Carolinas since 1995

3500 Regency Parkway  
Suite 260  
Cary, NC 27518  
(919) 297-0085

Joseph Angell, PE  
Regional Manager

700 Forest Point Circle  
Suite 116  
Charlotte, NC 28273  
(704) 527-2535

James Pearsall, PLS  
Regional Manager

[www.taylorwiseman.com](http://www.taylorwiseman.com)

## CONSTRUCTION QUALITY ASSURANCE (CQA) FOR LINER AND FINAL COVER SYSTEMS

### WHERE

Office of Smith Gardner - 14 N. Boylan Avenue Raleigh, NC 27603

### WHEN

February 20-21, 2018

### AVAILABLE CONTACT HOURS

7.3 PDHs



**SMITH+GARDNER** *Ignite*  
TECHNICIAN TRAINING SERIES



# ES

## eastern solutions

ENVIRONMENTAL EQUIPMENT RENTAL  
& FIELD SUPPORT SERVICES

Eastern Solutions is an environmental rental and field service support company. Our inventory continues to grow with new and updated equipment and supplies. The equipment rental services offers free pick-up and delivery 90 miles from Charlotte (includes but not limited to Greensboro, NC; Greenville, SC; Columbia, SC), whether it's to an office or your job site. If you are outside the 90-mile radius, we offer free ground to and from shipping (equipment is shipped in plastic crates with pre-printed return labels inside). We'd like to thank all of our existing clients for their continued support and welcome any new clients. If you are interested in hearing more about Eastern Solutions, please let us know and we would be more than happy to come out and visit.

**Below is a quick breakdown of the exciting things happening at ES:**



### **Added Inventory / Supplies:**

***Along with several items added to our growing inventory, here is a quick list of those specialty items that have been requested:***

- Core Drill w/ water kit
- Hammer Drills
- Diaphragm Pumps
- Air-Sparge System (Pilot Testing)
- SVE System (Pilot Testing)
- Sewer Camera w/Locator
- Downhole Camera w/DVR
- ATV / UTV Rental (Coming in April)
- Sand, Bentonite, and 55-Gallon Drums
- Large Selection of Vapor Points
- Carbon (Vapor/Water)



### **New Support Services**

***Based on our client's requests to expand our support services, Eastern Solutions now offers the following (Please note these services are for existing rental clients only):***

- Bushhogging and Heavy Clearing (i.e. Forestry Cutter)
- Small Excavations and Trenching
- Silt Fence Installation
- Minor Storm Water Repair
- Downhole Well Camera w/DVR Service
- Sewer Push Camera w/Locator Service
- Field Personnel Support
- AS/SVE System Support and Installation
- Equipment Calibration and Repair Services

4543 Charlotte Hwy, Suite 8  
Lake Wylie, SC 29710

Rentals@EasterSolutionsEnv.com  
Main Office: 803.746.5180



## Summary of Vapor Intrusion: The Conference II

*By Rick Kolb, P.G., Duncklee & Dunham*

The Carolinas Chapter of AEG held its second VI conference at the Hilton Charlotte University Place on October 5 and 6, 2017. The income from our first VI conference in Raleigh in 2014 exceeded expenses by \$25,000, and we were able to make a significant donation to AEG and to establish and seed the Carolinas Chapter scholarship fund. Our chapter decided to host another conference with hopes for a surplus to be generated for the scholarship fund.

We started the planning in January of this year, with hopes and expectations that the 2017 conference would be equally or more successful. With a total registration of 241, it was a success. We held this year's conference in Charlotte to make it more convenient for our members and professionals in the western part of North Carolina, and with the hopes that we'd have an increase in attendance by those in South Carolina, Georgia, and Tennessee.

Having organized a similar conference in 2014, we had a good foundation to start planning the 2017 conference. The planning committee was comprised of **Rebecca Deal** of Hart & Hickman, **Rick Kolb** of Duncklee & Dunham, **Paul Konnik** of Con-Test Laboratories, **Walt Plekan** of AECOM, **Grady Shields** of Wyrick Robbins Yates & Ponton, **Brian Smith** of Bridgestone, **Jennifer Thomas** of JennTec LLC, and **Rohit Warriar** of Geosyntec.



**Angie Frizzell**, who was a planner in 2014, after which she left the workforce and moved to Oklahoma, was also a planner. The planning committee held conference calls monthly to track progress and maintain our planned schedule, and had two visits to the hotel to scope out the presentation and exhibitor spaces. The conference included a full day of presentations on Thursday and most of Friday, ending at 2:45 PM on Friday to give registrants, speakers, and exhibitors time to leave town before the start of Charlotte's rush hour. We had 23 speakers from across the United States. Our keynote speakers were **Henry Schuver** of the U.S. EPA in Washington, D.C.; **Dr. Blayne Hartman** of Hartman Environmental Geoscience in Solana Beach, California; and **Rod Thompson** of August Mack Environmental in Indianapolis. On Thursday afternoon, we had a special session on TCE; four speakers of varying backgrounds presented the latest on this topic. At the end of their four presentations, they convened a panel and took questions from the audience. The presentation slides for all of our speakers at the conference are in a public Dropbox at:

<https://www.dropbox.com/sh/no0f3qkzaix6iji/AADMmuAjl6jcDK9qwXPbSmzUa?dl=0>

*(Continued on Page 19)*



*(Continued from Page 18)*

Registration included continental breakfasts and sit-down lunches each day, beverage breaks both mornings, a beverage and snack break on Thursday afternoon, and immediately following the TCE panel, a reception and hot hors d'oeuvres on Thursday evening. This is the same schedule we followed in 2014. Registration was \$299 for AEG members, \$349 for non-members, \$159 for employees in the public sector, and \$249 for those who joined AEG as part of the registration process. We had offered a similar discount for employees of the public sector at our 2014 conference and attracted about 15 registrants. However, in 2017 we had over 55 employees from local, state, and federal governments, due in large part to the support **Jim Bateson**, chief of the Superfund Section of the North Carolina Department of Environmental Quality (NCDEQ), and **Michael Scott**, Director of the Division of Waste Management of NCDEQ. During **Dale Andrews'** visit as President of AEG to the Carolinas Chapter in January 2017, he suggested we offer a discount to registrants that joined AEG. While the planners were skeptical that this offer would attract much attention, it did work -- we were successful in signing up **15 new members**.

The conference took place without a hitch; the staff at the Hilton took good care of us and were attentive to our needs and last-minute requests, including the addition of three rooms in which to serve the continental breakfasts and sit-down lunches, which allowed us to almost double the number of exhibitors. Registration until the last week was handled by Yolanda Natividad and Denise Brosie of Offinger Management, after which registration was through the Carolinas Chapter website and PayPal. We had only four people register on-site, which made check-ins simple. Students from the University of North Carolina at Charlotte -- **Karyn Hoggard**, **Erik Milde**, **Stephen Rachide**, **Aaron Winborne**, and **Matt Yankech** -- volunteered to work the registration booth and thus did not have to pay a registration fee.

Our conference attracted 18 exhibitors at \$750 each and three sponsors at costs that ranged from \$750 to \$1,000. While many of the exhibitors and sponsors were already yearly sponsors of the

Carolinas Chapter (and participated similarly at the 2014 conference), others came from other Mid-Atlantic and Eastern states. The fees they paid helped us keep down the cost of registration for the conference, and we thank them for their support. The exhibitors were Atlas Geo Sampling Company, Clean Vapor LLC, Con-Test Analytical Laboratory, Contaminant Control Inc., Ensaf Inc., Environmental Data Resources, ESC Lab Sciences, Geologic Exploration Inc., HEPACO LLC, HERR Inc., HRP Associates, Mills Environmental Insurance Services LLC, Pace Analytical Services Inc., Pine Environmental, SAEDACCO Inc., Shamrock Environmental Corporation, Tersus Environmental, and Vapor Pin Enterprises Inc. The sponsors were Prism Laboratories Inc., Eastern Solutions LLC, and Geologic Exploration Inc.

We offered 12 continuing education units for geologists and engineers, and with the help of one of our planners who is an environmental attorney, continuing legal education units for attorneys. The 12 hours of continuing education credit fulfilled the new annual requirement for licensed geologists in North Carolina.

Bottom line, the conference was a success, though financially not as great as in 2014 because the hotel costs were significantly higher than the Embassy Suites we used in 2014. In addition, our income was affected by discounts offered to the large number of public-sector employees and new AEG members. Nonetheless, our income exceeded expenses by approximately \$7,000, so we can make another deposit into our chapter's scholarship fund.





## Past Chair Perspective

*By Jay Bennet, Section Chair 1992*

I was AEG president in the early 1990s. The process of integration into the position took 4 years from Treasurer, then secretary to vice chairman to Chairperson (same as today). Much of the work and the speakers targeted catered to the Geological Engineering component of our business. Then once I became Chairperson, we moved more towards serving the membership by promoting the Environmental Geology discipline. This involved contacting industry leaders to speak about new techniques, regulations and sites that incorporated more of the environmental aspects (i.e., assessment, remediation, emerging technologies) related to what we currently work on today. Moving forward, the transformation of our industry to build upon our past still continues, I feel, which helps to bridge the gap between more traditional industry focus to the newer concepts, ideas and business adventures that provide sustainability for us all.

Thanks for all you do-  
Jay



**SGR**  
SUBHORIZON GEOLOGIC RESOURCES

**Subhorizon Geologic Resources**  
[www.subhorizonresources.com](http://www.subhorizonresources.com)

- Geologic Exploration & Mapping
- Economic Evaluation of Mineral Resources/Reserves
- Slope Stability Assessments
- Floodplain Determination and other Natural Hazards
- Groundwater Assessments
- Phase 1 Environmental Assessments
- Petrographic Services

North Carolina – Jim Stroud, PG

[336-416-3656](tel:336-416-3656)

[stroudjr@subhorizonresources.com](mailto:stroudjr@subhorizonresources.com)

Pennsylvania – Brett McLaurin, PG

[570-798-7824](tel:570-798-7824)

[mclaurinbt@subhorizonresources.com](mailto:mclaurinbt@subhorizonresources.com)



### SGS ACCUTEST NOW OFFERS A FULL ARRAY OF ENVIRONMENTAL SERVICES

SGS Accutest is now part of SGS Environmental, Health & Safety (EHS), North America. Added to the superior environmental services and technical expertise you've known, we now offer an ever-growing breadth of industry-leading services through the SGS group of companies. These include Industrial Hygiene analysis and monitoring through SGS Galson, Ultra Trace analysis (Dioxins/Furans, PCB Congeners, PBDE) through the Wilmington, North Carolina lab.

SGS Accutest has provided environmental testing and analysis for over 60 years. For more information on our services, contact Michelle Williams at +1 803 360 4634 or [michellw@accutest.com](mailto:michellw@accutest.com), or Kendall Sutler at +1 910 465 5958 or [kendall.sutler@sgs.com](mailto:kendall.sutler@sgs.com).

#### SGS

Wilmington, NC  
Charlotte, NC

Columbia, NC

Raleigh, NC

[www.us.sgs.com/environment](http://www.us.sgs.com/environment)

#### SGS ACCUTEST

Orlando, FL

[www.accutest.com](http://www.accutest.com)

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.





**CCI**

P: (910) 484-7000

281 Lane Parkway  
Salisbury, NC 28146

3434 Black & Decker  
Road  
Hope Mills, NC 28346

24-Hour ER Phone  
1-888-624-6555


Abatement  
Demolition  
Emergency Response/Disaster  
Response  
Contaminated Soil Remediation  
Industrial Services  
Industrial Blasting  
Geoseal Vapor Barrier Installation  
“Dedicated to our client’s  
success”



**Douglas A. Canavello, P.G.**  
President

503 Industrial Ave. (27406)  
P.O. Box 16265  
Greensboro, NC 27416-0265

(336) 335-3174 ext. 121  
(866) 545-9507  
Fax (336) 691-0648  
doug@pyramidenvironmental.com  
www.pyramidenvironmental.com



**TODD ELMORE**  
EDR SE Atlantic Regional Manager, GA, NC, SC

C / 706.818.3310  
telmore@edrnnet.com

6 Armstrong Road, Shelton, CT 06484  
800.352.0050 | edrnnet.com

# Rentals • Sales • Service

*The leading supplier of environmental monitoring, sampling and safety equipment.*



**PINE ENVIRONMENTAL  
SERVICES LLC**

## A sample of our inventory:

- Air Quality Monitors
- Clean Room Performance Testing
- Confined Space Entry
- Hazardous Waste Investigation
- Heat Stress Monitors
- High Volume Samplers
- HVAC Monitors
- Personal Sampling Pumps
- Moisture Meters
- Gas Detection
- Particle Counters
- Water Monitoring Equipment
- Noise Dosimeters
- And Much More!

*For after hours emergency needs, call: Paul Federline at 919-333-6287*

**CONTACT  
US TODAY!**

**866-646-7463**

www.pine-environmental.com

Pine Environmental Services LLC  
8411 Garvey Drive, Suite 113  
Raleigh, NC 27616



### Meeting Minutes 10-11-2017

By Jennifer B. Thomas, Secretary

1. Call to Order, 5:00 pm

2. Jacob Hundl, Jennifer Thomas, Josh Hanks, Rick Kolb, Sue Buchanan, Maddie German, Walt Plekan, Jane Gill-Shaler, Paul Weaver, and Rohit Warrior were in attendance. Quorum Obtained.

3. Welcome new board members. Anthony Herrmann replaced Courtney as membership chair. Josh Hanks took over GeoNews from Jen Thomas, Jacob Hundl took over the calendar from Josh Hanks and is helping Sue Buchanan with field trips and Rohit Warrior is running social media with Joanna Harbison.

4. Carolinas Chapter Finances  
Review of current chapter finances  
Checking: \$11,000  
Savings: \$15,707.64

Walt will figure out how to set up monthly bank statements to go to national.

5. The NCSTA Meeting is planned for October 19-20 in Greensboro. Paul will help most of the day on the 19th and will bring the toolkits. Maddie will email Greensboro area members for help. Rick has the new slide panels for the AEG booth. Eric Cross will transport them to GSO on his next trip. Paul is taking them and will either set up the night before or first thing in the morning.

6. Jacob is doing the calendar. Josh is considering a new computer and getting Publisher. Jen will be available for help by phone for his first issue of GeoNews.

7. Field Trips:

a. Emerald Hollow Mine, Hiddenite, NC is Sat Oct 21st, 9AM -2PM. 4 SC and NC CEUs were approved. The field trip is full.

b. 2018 Spring USC Field Trip will be hosted by Lindsey LaRocque and Ali Tabrizi in SC and will include a Columbia, SC tour and a Friday Dinner Meeting Chapter meeting. The trip is scheduled tentatively for March 9-10, 2018. We will visit the

Geotech Lab at the University in the morning, visit one dam before lunch, go to lunch, then visit one to two dams in the afternoon. Maddie cannot attend, Susan A. will act as chair for the meeting and field trip.

8. Greensboro Meeting – Final 40 Year Anniversary Meeting. We estimate 70-80 based on usual turnout, but a head count for food would help. The meeting is October 26th - The Public, 433 Spring Garden Street, GSO – Cyrus Parker to speak. Maddie will email past chairs reminder and invitation. Potential Sponsor Tables, Already Eastern Solutions (Also wants a drink ticket), We need to double check with other sponsors about exhibiting. Eric & Becca are still on field projects. Space is larger than we need. Ideas to make this meeting unique: Geology trivia, rock ID, normal raffle, Black balloons and streamers if they are allowed in this space. Josh and Rohit can't make it.

9. Let's find out the Jahns Lecturer schedule and invite the Jahns Lecturer to the Charlotte meeting if it will work. Susan working with Nashville and Atlanta Chapters to work out scheduling details. Usually the AEG president speaks in Charlotte, but Greg was just at UNCC before the VI conference, maybe let him speak in Raleigh and visit Wake Tech and NCState?

10. The VI Conference was overall a great meeting. There were 240 attendees; 20 registered through Paypal after registration through national was over; 4 onsite. Most people pre-registered. The hotel was too expensive. We had 55 public sector attendees. The crowd was a very enthusiastic crowd. We had great sponsors and exhibitors and the conference was well organized.

11. 2019 Asheville Meeting: We signed a contract with Asheville Community Theater to have the opening session (\$1,500). Paul is working with Accents on Asheville for guest tours. Asheville Visitor folks have been very helpful. Kudos to Jane (Continued on Page 23)



(Continued from Page 22)

for her great logo. Sheraton and Aloft are proposed for overflow hotels. Rick suggested talks: emerging contaminants, one-day symposium rising sea levels, other environmental topics.

12. We should urge students to start applying for the Carolinas Scholarship the fall before since deadline is February 1 and it takes a while to get everything together. We will continue the 50/50 raffles at the meetings.

13. Social activities: Held the Durham Bulls game over the summer but unable to get traction in Charlotte or Greensboro. Possibly do a brewpub social over the holiday if someone has time to organize. Any of the cities. Email Maddie and Adam if interested in setting this up.

14. Ideas to grow membership in SC: Rick will talk to Sherri about partnering with the Clemson Hydrosymposium. She offered joint meetings. We need to send some people to one.

15. Next Call will be early December, look for the Google Doodle Poll.

16. Rick noted this was the first meeting agenda completed in several years. Congratulations team!

Adjourn 6:00 PM

### Alan King

HERR, Inc.  
Business Development  
(910) 640-2607 Work  
(910) 234-3172 Mobile  
[al.king@herrteam.com](mailto:al.king@herrteam.com)  
303 S. Maulsby Street  
Whiteville, NC. 28472  
[www.herrteam.com](http://www.herrteam.com)

## GEOLOGIC EXPLORATION

Monitoring & Recovery Well Specialists

### JASON MANTAK

176 Commerce Boulevard  
Statesville, NC 28625  
[jmantak@gexnc.com](mailto:jmantak@gexnc.com)

Tel: 704-872-7686  
Fax: 704-872-0248  
1-800-752-8853



Full-Service Analytical & Environmental Solutions  
*When You Need RESULTS...*

### ADAM PHILLIPS

Customer Service Representative  
Raleigh, NC

c 919.451.3370  
f 704.525.0409

[aphillips@prismlabs.com](mailto:aphillips@prismlabs.com)  
[www.prismlabs.com](http://www.prismlabs.com)  
800.529.6364

449 Springbrook Rd., Charlotte, NC 28217 | Mail: PO Box 240543, Charlotte, NC 28224-0543

*A Woman Owned, Small Business Administration Certified Company*







**Schnabel**  
ENGINEERING  
schnabel-eng.com

DAM + LEVEE ENGINEERING  
GEOTECHNICAL ENGINEERING

RISK MANAGEMENT  
TUNNEL ENGINEERING

GEOSTRUCTURAL ENGINEERING  
ENVIRONMENTAL SERVICES

GEOLOGY AND GEOSCIENCES  
CONSTRUCTION QA/QC



Environmental  
Conservation  
Laboratories, Inc.

**JIM HAYS**  
Account Manager

102-A Woodwinds Industrial Ct.  
Cary, NC 27511

Direct Line: (919) 812-4471  
Lab: (919) 677-1669

jnhays@encolabs.com • www.encolabs.com



# GeoSearch

On time. On target. In touch.™

## CALENDAR OF EVENTS—2017

### *Geological Events in the Carolinas*

Courtesy of AEG Carolinas Chapter—[www.aegcarolinas.org](http://www.aegcarolinas.org). Last updated December 22, 2017  
Send updates/corrections to Jacob Hundl, [geotex02@gmail.com](mailto:geotex02@gmail.com)

**Date: Thursday, January 4, 2018**

Event: Engineers Without Borders monthly meeting, Research Triangle Park Professional Chapter

Location: 6:30-7:45 PM at the offices of Camp Dresser & McKee; 5400 Glenwood Avenue, Suite 400; Raleigh

Details: <https://www.meetup.com/EWB-USA-RTP-Chapter/events>

**Date: Wednesday, January 17, 2018**

Event: NCBLG Board Meeting

Location: State Board of Examiners of Plumbing, Heating and Fire Sprinkler Contractors, Raleigh, NC

Time: 9:00 am

Contact: <https://www.ncblg.org/meetings/>

**Date: Thursday, January 18, 2018 (meetings are held on the third Thursday of the month)**

Event: Meeting of South Carolina Association of Environmental Professionals

Presentation: TBD

Cost: Annual fee of \$25 includes pizza, beer and soft drinks at all meetings

Time: 6:30pm Social with Pizza & Beverages, 7:00pm Presentation

Location: Jim Hamilton-L.B. Owens Airport – 1400 Jim Hamilton Boulevard, Columbia, SC

Contact/RSVP: Sherri Scott at [sherri.scott@tersusenv.com](mailto:sherri.scott@tersusenv.com)

**Date: Thursday, January 25, 2018**

Event: AEG Carolinas Winter Meeting

Location: Draught, 601 S Cedar Street, Charlotte, NC

Presentation By: Dr. Kevin T. Finneran, Associate Professor, Clemson University Environmental Engineering

Time: 5:30pm social begins, 7:00pm buffet dinner, 8:00pm talk

Cost: Members \$30, Non-members \$40, Public sector \$15, Teachers \$10; Non-members \$60; Students free with ID

Reservation Deadline: Thursday, January 18, 2018

Contact: [jen@jennotecllc.com](mailto:jen@jennotecllc.com)

Details: <http://aegcarolinas.org/charlotte-dinner-meeting-jan-25-2018/>

**Date: Thursday, February 1, 2018**

Event: Engineers Without Borders monthly meeting, Research Triangle Park Professional Chapter

Location: 6:30-7:45 PM at the offices of Camp Dresser & McKee; 5400 Glenwood Avenue, Suite 400; Raleigh

Details: <https://www.meetup.com/EWB-USA-RTP-Chapter/events>

**Date: Monday, February 5, 2018**

Event: NC Water Resources Association – Wake County Efforts to protect Private Well Users from Contamination  
Presentation By: Mr. Evan Kane, P.G., Wake County Department of Environmental Sciences

Cost: Members Early-\$20/Late-\$30, Non-member Early-\$30/Late-\$40, Student member Early-\$15/Late-\$30

Time: 11:30am-1:30pm

Location: Jane S. McKimmon Center, Raleigh, NC

Details: <http://www.ncwra.org/event-2755222>

**Date: Thursday, February 15, 2018 (meetings are held on the third Thursday of the month)**

Event: Meeting of South Carolina Association of Environmental Professionals

Presentation: TBD

Cost: Annual fee of \$25 includes pizza, beer and soft drinks at all meetings

Time: 6:30pm Social with Pizza & Beverages, 7:00pm Presentation

Location: Jim Hamilton-L.B. Owens Airport – 1400 Jim Hamilton Boulevard, Columbia, SC

Contact/RSVP: Sherri Scott at [sherri.scott@tersusenv.com](mailto:sherri.scott@tersusenv.com)

**Date: Thursday, March 1, 2018**

Event: Engineers Without Borders monthly meeting, Research Triangle Park Professional Chapter

Location: 6:30-7:45 PM at the offices of Camp Dresser & McKee; 5400 Glenwood Avenue, Suite 400; Raleigh

Details: <https://www.meetup.com/EWB-USA-RTP-Chapter/events>

(Continued on Page 26)



WWW.CHOICE-ENVIRO.COM

### RENTALS & SUPPLY SALES

WATER QUALITY, WATER SAMPLING, AIR MONITORING,  
& SOIL SAMPLING

**NICOLE MANNING**  
919-369-1001 (DIRECT)  
919-363-6890 (FAX)  
[NICOLE@CHOICE-ENVIRO.COM](mailto:NICOLE@CHOICE-ENVIRO.COM)

WE ALSO RENT THE KAWASAKI MULE 3010  
TRANS 4X4 XUV!

BACKPACK & HANDHELD GPS, GEM 2000, TVA 1000B, SURVEY EQUIP., GENERATORS, LAPTOPS, ANEMOMETERS, MONSOON PUMPS, PERISTALTIC PUMPS, BLADDER PUMPS & NOISE DOSIMETERS & LOTS LOTS MORE!

- YSI
- HORIBA
- RAE
- IN-SITU
- PHOTOVAC
- ISCO
- LAMOTTE
- QED
- QUEST
- TSI
- LANDTEC
- TRIMBLE
- SOLINST
- PROACTIVE



(Continued from Page 25)

### University Spring Breaks

School: University of Georgia

Date: March 10-16, 2018

School: North Carolina State University

Date: March 5-9, 2018

School: Appalachian State University

Date: March 5-9, 2018

School: University of North Carolina Charlotte

Date: March 5-9, 2018

School: University of North Carolina Chapel Hill

Date: March 9-18, 2018

School: University of South Carolina Columbia

Date: March 11-18, 2018

School: Clemson University

Date: March 19-23, 2018

School: College of Charleston

Date: March 18-24, 2018

### Date: Friday, March 9, 2018

Event: AEG Carolinas & USC Spring Meeting

Location: 902 Barnwell Street, Capstone Hall, Columbia, SC

Presentation by: Dr. Lindsey LaRocque and Dr. Ali Tabrizi

Topic: Dam related studies at the University of South Carolina

Time: 6:00pm-9:00pm, one hour social, one hour dinner, and one hour presentation

Cost: Members \$30, Non-members \$40, Public sector \$15,

Teachers \$10; Non-members \$60; Students free

Details: <http://aegcarolinas.org/news/>

### Date: Saturday, March 10, 2018

Event: AEG Carolinas & USC Spring Field Trip

Location: 300 Main Street, Columbia, SC

Time: TBD

Cost: TBD

Details: <http://aegcarolinas.org/news/>

### Date: Thursday, March 15, 2018 (meetings are held on the third Thursday of the month)

Event: Meeting of South Carolina Association of Environmental Professionals

Presentation: TBD

Cost: Annual fee of \$25 includes pizza, beer and soft drinks at all meetings

Time: 6:30pm Social with Pizza & Beverages, 7:00pm Presentation

Location: Jim Hamilton-L.B. Owens Airport – 1400 Jim Hamilton Boulevard, Columbia, SC

Contact/RSVP: Sherri Scott at [sherri.scott@tersusenv.com](mailto:sherri.scott@tersusenv.com)

### Date: Friday, March 16, 2018

Event: ASBOG Geology Exam

Details: Deadline to apply for the exam is January 26, 2017 (and preapproval to take the exam before that)

Location: McKimmon Center, NC State University, Raleigh

Contact: [www.ncblg.org](http://www.ncblg.org)

### Date: March 23-24, 2018

Event: AEG-DMV Spring Environmental and Engineering Geology Symposium

Location: TBD, Radford, VA

Abstract Deadline: Friday, February 18, 2018

Contact: [jen@jennotecllc.com](mailto:jen@jennotecllc.com)

### Date: Friday, April 12, 2018

Event: AEG Carolinas Spring Meeting

Location: TBD, Raleigh, NC

Time: 6:00pm-9:00pm, one hour social, one hour dinner, and one hour presentation

Cost: Members \$30, Non-members \$40, Public sector \$15,

Teachers \$10; Non-members \$60; Students free

Details: <http://aegcarolinas.org/news/>

### Date: April 12-13, 2018

Event: Geological Society of America Southeastern Annual Sectional Meeting

Location: Hilton Knoxville, 501 West Church Avenue, Knoxville, TN, 37902

Abstract Deadline: January 16, 2018

Early Registration Deadline: March 5, 2018

Hotel Registration Deadline: March 20, 2018

Information: [https://www.geosociety.org/GSA/Events/Section\\_Meetings/GSA/Sections/se/2018mtg/home.aspx](https://www.geosociety.org/GSA/Events/Section_Meetings/GSA/Sections/se/2018mtg/home.aspx)

(Continued on Page 27)





(Continued from Page 26)

### University Spring Semester Finals

School: University of Georgia

Date: April 27-May 3, 2018

School: North Carolina State University

Date: April 30-May 9, 2018

School: Appalachian State University

Date: May 4-10, 2018

School: University of North Carolina Charlotte

Date: May 3-10, 2018

School: University of North Carolina Chapel Hill

Date: April 30-May 8, 2018

School: University of South Carolina Columbia

Date: May 2-9, 2018

School: Clemson University

Date: April 26-May 4, 2018

School: College of Charleston

Date: April 25-May 2, 2018

### Date: September 16 – 22, 2018

Event: AEG Annual Meeting

Location: Hyatt Regency San Francisco, Five Embarcadero Center, San Francisco, California, 94111

Contact: [contact@aegweb.org](mailto:contact@aegweb.org)

### Date: June 8 - 14, 2019

Event: AEG Grand Canyon Field Trip

Location: Flagstaff, Arizona

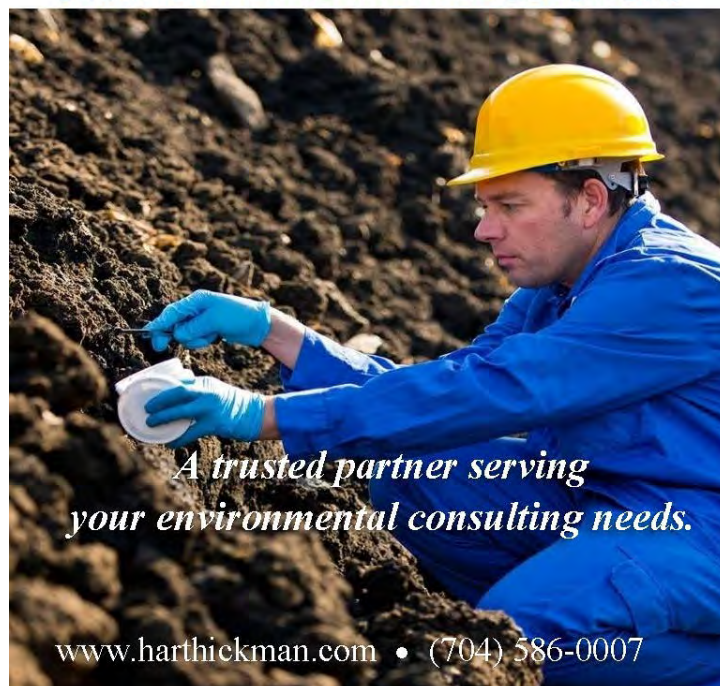
Costs: TBD

Details: <http://aegcarolinas.org/aeg-grand-canyon-field-trip-june-2019/>

### Date: September 15 - 22, 2019

Event: AEG Annual Meeting

Location: Asheville, North Carolina



Jennifer Thomas Environmental Contracting

\* Phase I and II ESAs \* Asbestos Inspections \* UST

**Jennifer B. Thomas, P.G.**

704-491-7724

[jen@jennteccllc.com](mailto:jen@jennteccllc.com)

[www.jennteccllc.com](http://www.jennteccllc.com)

P.O. Box 30334  
Charlotte, NC 28230

**Chad D. Northington, PE**  
Southeast District Technical Manager



Technology-Based Solutions  
for the Environment

[www.regenesiS.com](http://www.regenesiS.com)

Tallahassee, FL

Mobile: 864.884.4346

[cnorthington@regenesiS.com](mailto:cnorthington@regenesiS.com)



# MEMBERSHIP APPLICATION



## Association of Environmental & Engineering Geologists

**AEG is geology in practice.**

The benefits of AEG membership are many, but the simplest answer is that membership in AEG can enhance your technical and business knowledge, provide career opportunities, and introduce you to thousands of other professionals all while having fun in the process! Visit [www.AEGweb.org](http://www.AEGweb.org) to see all of the great benefits we have to offer our members.

### 1. CHOOSE MEMBERSHIP

#### FULL MEMBER

☐ Full Member Dues - \$140\*

Applicants for Member Class shall hold a degree in geology, engineering geology, or geological engineering, or a degree in a related professional field with 30 semester-hours of credit in the geosciences. In addition, the applicant shall be practicing in the field of Engineering Geology, Environmental Geology, or Hydrogeology.

#### AFFILIATE

☐ Affiliate Dues - \$100\*

Applicants for Affiliate Member Class shall be scientists or engineers who work with engineering geologists, or persons interested in environmental and engineering geology.

#### TEACHER

☐ Teacher Dues - \$35\*

Applicants for Teacher Member Class shall be engaged in full-time teaching at the Primary, Secondary or Post-Secondary level in the area of Earth Science education or a related subject.

#### ORGANIZATIONAL AFFILIATE

☐ Org. Affiliate Dues - \$80\*

Applicants for Organizational Member Class shall be engaged as members of similar geological science organizations but do not wish to become Full members of the Association.

#### INTERNATIONAL

☐ Int'l Member Dues - \$35\*

Applicants shall hold the same requirements as Full Member Class. International Members receive (online digital access ONLY) to the *E&EG Journal*, Annual Directory, Annual Meeting Program with Abstracts and the *AEG News*.

If you are a current student and interested in membership, please visit [www.AEGweb.org](http://www.AEGweb.org) to sign up online or download the Student Membership application to complete and mail in.

\* All paying memberships listed above require applicants to pay Section dues in addition to the applicable membership fee. Please visit [www.AEGweb.org](http://www.AEGweb.org) to view the entire list of sections and instructions on how to choose the section located within your zip/postal code.

I am joining Section \_\_\_\_\_

Section Dues

\$ \_\_\_\_\_

If you are not sure on the Section you should join, please contact us at (844) 331-7867 and we will be glad to assist you.

Send your completed form with payment to the:

Association of Environmental & Engineering Geologists

1100-H Brandywine Blvd

Zanesville, OH 43701-7303

Phone: (844) 331-7867 • Fax: (740) 452-2552 • [www.AEGweb.org](http://www.AEGweb.org)

### 2. CONTACT INFORMATION (please print legibly)

Individual Name \_\_\_\_\_

Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

ZIP+4 \_\_\_\_\_ Country \_\_\_\_\_

Phone ( ) \_\_\_\_\_

Fax ( ) \_\_\_\_\_

E-mail \_\_\_\_\_

Website \_\_\_\_\_

### 3. ADDITIONAL INFORMATION (complete as applicable to the membership you are seeking)

Institution/University (Current or Attended) \_\_\_\_\_

Anticipated Graduation Year or Graduation Year \_\_\_\_\_

Highest Program Degree Seeking or Received \_\_\_\_\_

Major \_\_\_\_\_ Focus \_\_\_\_\_

Are you a registered Geologist or Engineer? Yes \_\_\_\_\_ No \_\_\_\_\_

### 4. PERMISSIONS

I give permission to AEG to publish in print and online, including in Annual Directory as follows:

**Publish the following:**

☐ Website ☐ Name ☐ Company Name ☐ Address ☐ E-mail ☐ Do Not Publish

**I give permission for contact by e-mail from the following\*:**

☐ From AEG only

☐ From AEG-sponsored events (e.g., AEG Annual Meeting, Shlomon Conferences)

☐ From third party organizations with industry-related interests

☐ Do not want e-mail communication (do not list my email in my member record)

\* If you have agreed to email communications from AEG, please add the following email domains to your e-mail "safe list" now: [AEGweb.org](http://AEGweb.org). This will help to ensure that you receive all communications from AEG (i.e., [contact@AEGweb.org](mailto:contact@AEGweb.org) and all individual staff communications whose emails contain their name and end with [@AEGweb.org](mailto:@AEGweb.org)).

### 5. PAYMENT

☐ Check (Make check payable to AEG) Total Enclosed \$ \_\_\_\_\_

To join/renew and pay by credit card, please visit [www.AEGweb.org](http://www.AEGweb.org) and Join or Sign In (located in the upper right corner). AEG currently accepts the following credit cards: American Express, Discover, MasterCard and Visa. AEG is unable to accept credit cards by phone, fax, e-mail or mail.

If you do not remember your Username or Password, use the **Forgot Your Password?**

link on the AEG website by entering the e-mail address associated with your member record. Please contact the AEG office at (844) 331-7867 if you have any questions or have trouble signing in.

(Signature) \_\_\_\_\_

My signature attests that, to the best of my knowledge, I meet the academic and practice requirements for the membership class I have requested and that all information on this application are true and correct.

### 6. SEND YOUR COMPLETED FORM WITH PAYMENT TO THE ADDRESS ABOVE.

To join online, please visit [www.AEGweb.org](http://www.AEGweb.org).

AEG memberships are based on the calendar year. Applications received after October 1 will be entered for the following calendar year.

Thank you! We appreciate your support of the Association of Environmental & Engineering Geologists.

### FOR OFFICE USE ONLY

Recd

Ck#

Amt \$

ACKD





## AEG CAROLINAS CHAPTER – SPONSOR INFORMATION

The Carolinas Chapter of AEG supports many of its activities with financial assistance provided by our sponsors. Our activities include quarterly meetings, periodic field trips and seminars, a quarterly newsletter, and email announcements about our meetings and geoscience related activities. In addition, we donate large quantities of educational resources to science teachers.

We offer several levels of sponsorship, but they all have one goal: to keep the sponsor's name in front of our members and to bring you business. We have a real commitment to connecting our sponsors to potential buyers and will do all we can to help you build your business. Most of our members are practicing professionals with responsibility for selecting subcontractors, so our group is a great place to find new customers and to catch up with existing clients in an informal setting.

Our sponsors provide the financial support that allows us to have reasonably priced dinner meetings, host seminars, provide discounted dinner meeting costs for students and teachers, underwrite the cost of newsletters and our web site, provide geoscience mentors for students and young professionals, and support science education tools to our teachers and in our schools. All costs listed below are per year and end in December. New sponsorships received after October will continue to December of the following year.

### Silver Sponsor (\$275):

GeoNews Newsletter: Business card size ad (2" high x 3-1/2" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign-in table. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibits: Space for tabletop display at one meeting. Cost of meeting waived for one person on the exhibit date.

Email Announcements: Listing of your company name on each AEG Carolinas Chapter email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Chapter Web Page, [www.aegcarolinas.org](http://www.aegcarolinas.org), with a link to your site.

### Gold Sponsor (\$400):

GeoNews Newsletter: Quarter-Page ad (4-1/2" high x 3-1/2" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign in table. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibits: Space for tabletop display at two meetings. Cost of meeting waived for one person on the exhibit date.

Email Announcements: Listing of your company name on each AEG Carolinas Chapter email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Chapter Web Page, [www.aegcarolinas.org](http://www.aegcarolinas.org), with a link to your site.

### Platinum Sponsor (\$550):

GeoNews Newsletter: Half-page ad (4-1/2" high x 7" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign in table. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibit: Space for tabletop display at three meetings. Cost of meeting waived for one person on the exhibit date.

Email Announcements: Listing of your company name on each AEG - Carolinas Chapter email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Chapter Web Page, [www.aegcarolinas.org](http://www.aegcarolinas.org), with a link to your site.

### Titanium Sponsor (\$650):

Same as Platinum, but with a FULL PAGE ad in GeoNews. Limited to 2 Sponsors per year.

### GeoNews Newsletter Sponsorship Only

Businesses or individuals can also advertise in GeoNews without being a full sponsor. The annual rates for advertising in GeoNews are as follows:

Business Card	\$ 40.00
Quarter Page	\$ 60.00
Half Page	\$ 100.00
Full Page	\$ 200.00

Please complete the form below and mail to Walt Plekan, AEG Carolinas Sponsorship Chair. Please call or email if you have any questions (contact information below).

### AEG Carolinas Chapter Sponsorship Form

Please begin our sponsorship of the Carolinas Chapter of the Association of Engineering Geologists. Our sponsorship level is:

- ☐ Titanium Chapter Sponsorship, \$650/year  
☐ Platinum Chapter Sponsorship, \$550/year  
☐ Gold Chapter Sponsorship, \$400/year  
☐ Silver Chapter Sponsorship, \$275/year  
☐ GeoNews Newsletter Sponsor Only (see above)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Website URL: \_\_\_\_\_

Date of Payment: \_\_\_\_\_

Something about your company (use back of page for more room) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please enclose a business card or email ad in jpg, pdf, or doc to [Eric@pyramidenvironmental.com](mailto:Eric@pyramidenvironmental.com).

**SPONSOR ONLINE AT [WWW.AEGWEB.ORG](http://WWW.AEGWEB.ORG) or MAKE CHECK OUT TO AEG CAROLINAS**

(Modified 11/09/2016)

Snail mail form and payment to:

Eric Cross, P.G., AEG Carolinas Sponsorship Chair  
503 Industrial Avenue, Greensboro, NC 27406



## Thank You, AEG Carolinas Sponsors!!

### TITANIUM SPONSORS

**Enviro-Equipment, Inc.** 11180 Downs Road Pineville NC 28134  
[www.enviroequipment.com](http://www.enviroequipment.com)  
 Denise Chew, 704-588-7970, [denise@enviroequipment.com](mailto:denise@enviroequipment.com), Brian Chew, 888-274-8929, [brian@enviroequipment.com](mailto:brian@enviroequipment.com); We are a Woman-Owned Small Business, staffed by experienced professionals, committed to providing quality environmental equipment and products for rent or sale at reasonable rates. EEI is a stocking distributor of numerous environmental products for detection of air, water, and soil contamination.

**Eastern Solutions, LLC**, 4543 Charlotte Hwy, Suite 8 Lake Wylie, SC 29710 [www.easternsolutionsenv.com](http://www.easternsolutionsenv.com)  
 Edgar Alcaraz, Cell: (803) 280-0757, Office: (803) 746-5180  
[ecalcaraz@easternsolutionsenv.com](mailto:ecalcaraz@easternsolutionsenv.com)  
 Eastern Solutions would like to thank all of our clients for their continued support and word of mouth advertising. Our inventory continues to grow with new and updated equipment and supplies. If you would like an updated catalog, please contact us and we'll make sure to send an electronic copy to you. As always our rental services offer free pick-up and delivery 90 miles from Charlotte (includes but not limited to Greensboro, NC; Greenville, SC; Columbia, SC). In addition, to make deliveries more convenient, ES can drop off and pick-up the equipment at your site. If you are outside the 90-mile radius we offer free ground to and from shipping (equipment is shipped in crates for easy returns and return labels are pre-printed inside). If you need anything, please do not hesitate to contact our main office (803) 746-5180. If you are interested in hearing more about Eastern Solutions, please let us know and we would be more than happy to come out and visit.

### PLATINUM SPONSORS

**Pine Environmental Services, Inc.** 8411 Garvey Drive, Suite 113 Raleigh NC 27616 [www.pine-environmental.com](http://www.pine-environmental.com)  
 Paul Federline, 866-646-7463, [pfederline@pine-environmental.com](mailto:pfederline@pine-environmental.com) 919-713-0008; Pine Environmental Services, Inc., "The Environmental Supply and Support People" is the largest environmental supply and leasing company in North America. Pine is the leading provider of rental equipment in the nation with the latest instruments available. Pine Environmental Services, Inc. takes pride in their unprecedented customer support and competitive pricing. Extended hours of operation and after-hour emergency support are on hand.

**SGS Accutest**, 5500 Business Drive, Wilmington, NC 28405; [www.sgs.com](http://www.sgs.com); Michelle Williams, 803-360-4634, [michellew@accutest.com](mailto:michellew@accutest.com)

**Schnabel Engineering**, 11 Oak Branch Drive; Greensboro, NC 27407; [www.schnabel-eng.com](http://www.schnabel-eng.com), Gary Rogers, (336) 274-9456, [groggers@schnabel-eng.com](mailto:groggers@schnabel-eng.com). Schnabel provides specialized expertise and design for geotechnical, tunnel, and dam engineering projects across the US and worldwide. We are dedicated to providing technical excellence, value, environmental stewardship and innovation on every project. As an employee-owned company of over 300 diverse professionals, we have a passion for client service and tough technical challenges. An ENR Top 250 engineering firm, Schnabel serves both public and private sector clients.

### GOLD SPONSORS

**Contaminant Control, Inc. (CCI)**, 3434 Black & Decker Road, Hope Mills NC 28348. [www.cci-env.com](http://www.cci-env.com) Mark Vestal, 910-484-7000, [mark.vestal@cci-env.com](mailto:mark.vestal@cci-env.com). CCI is a full service environmental consulting company. Our services include asbestos abatement, remediation, demolition & specialty blasting.

**Con-test Analytical Laboratory**, 39 Spruce Street; East Longmeadow, MA 01028; [www.contestlabs.com](http://www.contestlabs.com)  
 Paul Konnik, 314-302-0431, [paul.konnik@contestlabs.com](mailto:paul.konnik@contestlabs.com); Con-Test Analytical Laboratory is a full service environmental testing laboratory with capabilities in nearly all soil, air and water analyses. Con-Test has experienced staff and state of the art instrumentation to provide quality analytical services, balancing response and prompt turnaround with

precise and reliable analyses, ensuring data integrity. Our value added service includes expertise in technical and customer service which is reflected in a diverse customer base.

**Geo-Search**, 3006 Bee Caves Rd, #230, Austin, TX 78746; [www.geo-search.com](http://www.geo-search.com), Scott Davis, 888-396-0042, [scott.davis@geo-search.com](mailto:scott.davis@geo-search.com); GeoSearch provides customers with fast, accurate, constructive information to help assess and manage environmental risk. GeoSearch is a complete source for all environmental due diligence needs including ASTM Environmental Database Reports, Historic Aerials, City Directory Research, Fire Insurance Maps, Lien and Title Search Investigations, and more all in one place. WDBE/HUB.

**Hart & Hickman, PC**; 2923 South Tryon Street, Suite 100; Charlotte, NC 28203; [www.harthickman.com](http://www.harthickman.com) Rebecca Deal, 704-887-4636; [rdeal@harthickman.com](mailto:rdeal@harthickman.com)

**Pace Analytical Services, Inc.**, 9800 Kinsey Avenue; Huntersville, NC 28078; [www.pacelabs.com](http://www.pacelabs.com) Korey Drew, 704-875-9002, [Korey.drew@pacelabs.com](mailto:Korey.drew@pacelabs.com)

**Pyramid Environmental** 503 Industrial Avenue Greensboro NC 27406 [www.pyramidenvironmental.com](http://www.pyramidenvironmental.com)  
 Doug Canavella, 336-335-3174, [doug@pyramidenvironmental.com](mailto:doug@pyramidenvironmental.com); Since 1990, as a professional, licensed engineering and geological firm, Pyramid has the expertise to research and analyze relevant environmental regulations, potential hazards, clean-up alternatives and environmental protection issues to design and implement solutions for environmental problems.

**SAEDACCO** 9088 Northfield Drive Fort Mill SC 29707 [www.saedacco.com](http://www.saedacco.com)  
 Peter Byer, 803-548-2180, [pbyer@saedacco.com](mailto:pbyer@saedacco.com) 803-548-2180; South Atlantic Environmental Drilling and Construction Co, Inc., (SAEDACCO), founded in 1993, is a southeast regional environmental services company. SAEDACCO is located in Fort Mill, SC and specializes in providing Direct Push, Drilling Construction, and Remediation services for the environmental industry.

**Smith Gardner, Inc.**, 14 N. Boylan Avenue, Raleigh, NC 27603; [www.smithgardnerinc.com](http://www.smithgardnerinc.com), Madeline German, 919-828-0577, [madeline@smithgardnerinc.com](mailto:madeline@smithgardnerinc.com)

**Taylor Wiseman & Taylor**, 3500 Regency Parkway, Suite 260, Cary, NC 27518, [www.taylorwisemantaylor.com](http://www.taylorwisemantaylor.com), Chad Howard, 919-297-0085, [choward@taylorwiseman.com](mailto:choward@taylorwiseman.com)

### SILVER SPONSORS

**AE Drilling Services, Inc.** Two United Way Greenville SC 29607 [www.aedrilling.com](http://www.aedrilling.com)  
 W. Martin Johnson, P.G., 864-288-1986, [mjohnson@aedrilling.com](mailto:mjohnson@aedrilling.com); AE Drilling Services has provided geotechnical, environmental, water supply, and mineral exploration drilling services to fellow professionals for over 40 years.

**Choice Environmental** 1804 Holt Road Cary NC 27519-5984 [www.choice-enviro.com](http://www.choice-enviro.com)  
 Nicole Manning, 919-369-1001, [nicole@choice-enviro.com](mailto:nicole@choice-enviro.com), Steve Jenkins, [steve@choice-enviro.com](mailto:steve@choice-enviro.com); Choice Environmental Services, LLC. We carry or rent backpack & handheld GPS, EEM2000, TVA1000B, Survey Equipment, Generators, Laptops, anemometers, monsoon pumps, peristaltic pumps, bladder pumps, and more. We also rent the Kawasaki Mule 3010.

**Clean Vapor, LLC**, PO Box Charlotte; NC 28271; [www.cleanvapor.com](http://www.cleanvapor.com)  
 Tom Hatton, 9083625616, [thatton@cleanvapor.com](mailto:thatton@cleanvapor.com); Clean Vapor, LLC is a design-build vapor intrusion mitigation company with 30 years of experience with offices in New Jersey and North Carolina. We specialize in existing building and new construction mitigation. Our enhanced (Continued on page 30)

## Thank You, AEG Carolinas Sponsors!!

focus is on integration of energy efficient dynamic controls and remote monitoring technology.

**EGIS, PA** 441 Northside Drive Chapel Hill NC 27516  
[www.waterwellvideos.com](http://www.waterwellvideos.com)

Mike Vaught, 9199298363, [gwinvest@juno.com](mailto:gwinvest@juno.com), Lynn Bressler, 9199298363, ; EGIS, PA specializes in downhole geophysical and borehole video inspection services. We can assist in well development and rehabilitation.

**Environmental Conservation Labs (ENCO)** 102-A Woodwinds Industrial Court Cary NC 27511 [www.encolabs.com](http://www.encolabs.com)

Jim Hays, 919-467-3090, [jhays@encolabs.com](mailto:jhays@encolabs.com), Susan Purser, [spurger@encolabs.com](mailto:spurger@encolabs.com); ENCO Labs is committed to having the best service in the industry. With this service, we were also the most economical lab to use as well. Fewer errors, less rework time, and solid defensible data.

**Environmental Data Resources (EDR)** 6 Armstrong Road, Shelton, CT 06484 [www.edrnet.com](http://www.edrnet.com)

Todd Elmore, 706-818-3310, [telmore@edrnet.com](mailto:telmore@edrnet.com); Founded in 1990 by environmental professionals, EDR is headquartered in Shelton, Connecticut. Twenty regional offices are located throughout the United States. EDR is wholly owned by Daily Mail and General Trust, plc (DMGT) subsidiary [DMG Information](http://www.dmg.com). Other DMGI companies include Trepp, Landmark Information Group, Lewtan Technologies and Genscape. For more information about EDR, please visit [www.edrnet.com](http://www.edrnet.com).

**ESP Associates, P.A.** 7204 W. Friendly Ave., Suite G Greensboro NC 27401 [www.espassociates.com](http://www.espassociates.com)

Paul Weaver, 336-267-2165, [pweaver@espassociates.com](mailto:pweaver@espassociates.com); ESP Associates with offices in Fort Mill, South Carolina and in Wilmington, Raleigh, Concord, and Greensboro, North Carolina. Providing Civil Engineering, Water Resources, Mobile 3D Mapping, 3D Laser Scanning, Geotechnical Engineering, Materials Testing, Special Inspections, Geophysics, Hydrographic Surveys, Transportation Geotechnical Engineering, Environmental Engineering, GIS, Landscape Architecture/Land Planning, and LEED services since 1986

**Geologic Exploration, Inc.** 176 Commerce Blvd. Statesville NC 28625  
[www.geologicexploration.com](http://www.geologicexploration.com)

Matt Tischler, 800-752-8853, [mtischler@gexnc.com](mailto:mtischler@gexnc.com), Steve Taylor, 704-872-7686, ; Geologic Exploration is a full service environmental drilling contractor, specializing in monitoring and recovery wells. We also perform rock coring, packer testing, well abandonment, and other environmental services.

**Hazmat Emergency Response and Remediation, Inc. (HERR)**, 303 S Naultsby Street; Whiteville, NC 28472; [www.herrteam.com](http://www.herrteam.com);

Al King, 919-234-3172, [al.king@herrteam.com](mailto:al.king@herrteam.com)

**Parratt-Wolff, Inc.**, 501 Millstone Drive, Hillsborough, NC 27278; [www.pwinc.com](http://www.pwinc.com), Gary Ellingworth, 919-644-2814, [gellingworth@pwinc.com](mailto:gellingworth@pwinc.com)

**Prism Laboratories** P. O. Box 240543 Charlotte NC 28224-0543  
[www.prismlabs.com](http://www.prismlabs.com)

Adam Phillips, 919-451-3370, [aphillips@prismlabs.com](mailto:aphillips@prismlabs.com)  
Since its inception in 1992, Prism Laboratories, a woman owned small business certified company, has been committed to providing the highest level of quality analytical services and technical support to our customers in the environmental monitoring, water qual-

ity and waste disposal market. Our team of highly qualified professionals is focused on ensuring on-time delivery of accurate and precise analytical results, while working one on one with our customers to provide customized service to suit each client's specific requirements. Prism Laboratories is NELAC and DOD accredited, holds State certifications throughout the Southeast and maintains an extensive list of accreditations and memberships pertinent to the analytical testing and environmental monitoring industry.

**Regenesis** 123 Ridgecrest Drive Greenville SC 29609  
[www.regenesis.com](http://www.regenesis.com)

Chad Northington, P.E., 864-884-4346, [cnorthington@regenesisc.com](mailto:cnorthington@regenesisc.com) 800-529-6364; Our mission is to develop, manufacture and market advanced, innovative technologies for the restoration or remediation of natural resources such as groundwater and soil. Regenesis' efforts are driven by and focused on technology performance, customer needs and cost-effectiveness. Looking forward, we will seek out and explore new technologies for the prevention and/or remediation of a broad range of environmental concerns.

**Shamrock Environmental Corporation**, 6106 Corporate Park Drive, Browns Summit, NC 27214; [www.shamrockenviro.com](http://www.shamrockenviro.com); Rick Wigal, 336-375-1989, [rwigal@shamrockenviro.com](mailto:rwigal@shamrockenviro.com)

*Our sponsors are a valuable resource for the funding of meetings, outreach and educational programs. Please honor their support by giving them your business. If you don't see your company name here, contact one of our sponsor chairs, Eric Cross at [eric@pyramidenvironmental.com](mailto:eric@pyramidenvironmental.com) or Rebecca Deal at [RDeal@harthickman.com](mailto:RDeal@harthickman.com) for sponsorship information, or fill out and mail the Sponsorship form on page 34 in this issue.*

***You may also renew or join our national sponsors online at [www.aegweb.org](http://www.aegweb.org).  
Consider becoming a national AEG Sponsor!***