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T H I N K   G R E E N





# Some Thoughts on Looking Forward: More Inclusive Governance

The American Academy of Environmental Engineers (Academy) is a venerable organization with its roots established in the mid 1950s. The roots were planted in the early '50s when a small group of sanitary engineers felt those working in the emerging field of sanitary engineering and the field itself deserved better professional recognition. This proposal for recognition was brought before the Committee for the Advancement of Sanitary Engineering of the American Society of Civil Engineers (ASCE). These 'sanitary engineers' must have been quite persuasive because about two years later the Joint Committee for the Advancement of Sanitary Engineering was formed with representative members from ASCE, the American Public Health Association, the American Society for Engineering Education, American Water Works Association, and the Water Pollution Control Federation (now WEF). One of its first major decisions, with the sponsorship and support of the five organizations, was the formation of the American Sanitary Engineering Intersociety Board (ASEIB) – the predecessor of the Academy.

The establishment of the ASEIB occurred at a time when credentialing was gaining favor within major engineering disciplines, particularly civil engineering. States were ramping up their PE licensing programs, and post graduate credentialing was being seriously promoted by the then fledgling sanitary engineering community. In addition, the need for public health engineers/scientists to be recognized as possessing special knowledge and skills in one or more of the fields of sanitary engineering was being expressed forcefully by

those who practiced in the various fields of sanitary engineering. The preponderance of these skills and knowledge in sanitary engineering/science were then held by professionals working in the federal public health service, state health departments, military organizations, and local health departments, generally in that order. Thus the proponents for recognition were to be found mostly among members in the aforementioned areas who even threatened to form a new national organization, The Institute of Sanitary Engineering, for sanitary engineers, in order to gain their recognition. According to Earnest Boyce, a founding board member of ASEIB, in *AJPH*, Vol. 53, No. 7, July 1963, "In a report of the ASCE Committee on the Advancement of Sanitary Engineering given in January 1949, it was noted, 'Sanitary Engineers have no single home.' Because of their broad interests, they are scattered through a dozen or more technical, scientific, and engineering organizations, with the choice of their allegiance depending in large measure on their particular interests and pursuits."

The Academy now having been created, the founding members responded promptly to its constituency by carving out the niche for its core purpose as that of providing certification for the professionals in the sanitary engineering community. However, the price for this action was, a) the certificants of ASEIB must be called 'Diplomates,' and b) they must retain their membership and home in ASCE. Since the practice of sanitary engineering was regarded as a sub-specialty of civil engineering, the professional activities of this community including within ASEIB were structured

so as not to behave like an organization in direct competition with ASCE. This maneuver preserved ASCE's dominance as the major engineering society while offering certification to the sanitary engineering community via the ASEIB.

Needless to say, the issue of governance remained a high priority among the sanitary engineers, both at the ASCE level and within the newly established ASEIB. With its core business directed exclusively to certification, its governance now required a body comprised entirely of 'certified' individuals. This governance structure was true to the tenor of the times and has served the ASEIB, now the Academy, very well for a good half century. In this period, the Academy has steadfastly maintained its focus on certifying sanitary/environmental engineers, maintained its high standards, and protected the integrity of the certification process.

This concentration on task, however, has not prevented the Academy from taking stock of changes within the profession over the last quarter century, and to make adjustments to accommodate these changes. During the last decade, the Academy has engaged in a series of deliberations intended to retool its operations and focus in order to better serve an even more diversified environmental engineering community. These deliberations have resulted in some significant changes in Academy operational protocol. One such change is the restructuring of the composition of the Board of Trustees.

As you turn my next page, I will engage you in a discussion of the genesis and rationale for this change in Board composition. ■■

## ACADEMY NEWS

### Design Your Sustainable Dream House

AAEE K-12 Committee has created an Engineering Student Contest: *Design Your Sustainable Dream House*. The contest is open to all students at schools across the country. Two winning entries, one for grade-school/middle school students and one for high school students, will receive a trip to Washington, DC and be awarded during the US Science & Engineering Festival in October. Volunteers are needed to help spread the word among schools.

Sponsorships and donations are needed. They will be tax deductible as all monies will go through the Environmental Engineering Foundation. To download details about the program visit <http://www.aaee.net/Website/SustainableDreamHouseContest.htm> and a copy of the sponsorship form, email Joe Cavarretta: [JCava@aaee.net](mailto:JCava@aaee.net).

### Thank You to Our Supporters

AAEE is thankful for its supporters.

In this issue, we list our Academy Contributors for 2009. In addition to these individuals, we would also like to thank the following companies that, with their financial contributions, sponsored the 2010 Excellence in Environmental Engineering Awards:

- AECOM
- Black & Veatch
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- CDM
- EA Engineering Science and Technology, Inc.
- Greeley and Hansen
- Hazen and Sawyer
- HDR
- Malcolm Pirnie
- MWH

- PBS&J, and
- SCS Engineers.

Thank you for your continuing support of AAEE programs.

### AAEE in Action

*Environmental Engineer* would like to feature profiles of our members doing their part in relief efforts around the world. If you are a current member and have taken part in the relief efforts, we would love to hear from you. Currently, we are seeking segments on the Gulf Coast Oil Spill.

If you would like to share your experiences, please email your story to [YMoulden@aaee.net](mailto:YMoulden@aaee.net). Word count should be a maximum of 1,500 words. EE

## 2010 Election Results

The ballots have been counted. While the results will not be official until the Annual Meeting when the Teller's Report is confirmed, the following individuals have been elected for 2011. Current President-Elect, Brian P. Flynn, will succeed to the Office of the President; Michael W. Selna will be President-Elect; Pasquale 'Pat' Canzano has been voted as Vice President; and Joseph F. Malina and Richard J. Pope have been elected to the two open Trustee-at-Large positions.

AAEE would like to thank our 2011 Election Teller's Committee for counting the ballots: Gary M. Bratt, Ph.D., P.E., BCEE, Michael B. Hearn, P.E., BCEE, and Amit Pramanik, Ph.D., BCEEM.



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# Convergence and Collaboration -Part 2

In the Spring Issue of *Environmental Engineer*, I promised two schematics for the Summer issue: one outlining all AAEE collaborations and activities with Sponsoring Organizations (SOs) and other organizations; the other outlining AAEE committee interactions. The committees are now available online at [www.aaee.net](http://www.aaee.net) under Membership. If you wish to join a committee, please email me at [jcava@aaee.net](mailto:jcava@aaee.net). The SO activity was a challenging task. Maintaining the schedule for all activities and working to maximize its value is even more challenging. To make life easier, general activities are categorized by national SOs followed by SO chapter collaborations, AAEE independent initiatives, and other organization initiatives. Except for AAEE Independent Events, virtually all participation was free of charge. For details on upcoming activities, go to the AAEE Web site: [www.aaee.net](http://www.aaee.net), check Highpoints Newsletter, or contact AAEE.

The goal is to increase your involvement in AAEE activities and to spread the word not only to members of active SOs but also to SOs that are not actively involved. *The Academy needs your help in this regard.* To those members who have stimulated working relationships with SOs and their chapters, **thank you**. Your contribution to AAEE activities is invaluable. To the Executive Directors and Staffs of SOs and their chapters, **thank you** for your commitment to AAEE and the industry.

## Air & Waste Management Association

- Advertising – AAEE Certification and E3 Awards Competition
- Breakfast Presentation – Annual Conference
- Exhibit – Annual Conference
- Full Attendee – Annual Conference
- Other – Look for more cooperation between A&WMA and AAEE

## American Institute of Chemical Engineers

- Breakfast Presentation – Spring and Annual Conferences
- Exhibit – Spring and Annual Conferences
- Full Attendee – Spring and Annual Conferences
- Member Presentations in AIChE Education Courses
- Sustainability Collaboration – Working with Environmental Committee
- Workshops/Short Courses – Spring and Annual Conferences (PDHs/CEUs)

## American Public Health Association

### American Public Works Association

- Breakfast Presentation – Annual Conference
- Exhibit – Annual Conference
- Full Attendee – Annual Conference
- Sustainability Initiative – In discussions
- Other – APWA graciously allowed several Spring BOT Meetings at its headquarters.

## American Society of Civil Engineers

- Cooperating organization
- (See EWRI in Chapters Section)

## American Society for Engineering Education

### American Society of Mechanical Engineers

- Editorial Exchange – AAEE Certification
- Environmental Sustainability – Exploring AAEE role in ASME sustainability initiative

## American Water Works Association

- AAEE/AIDIS/AWWA Luncheon – Annual Conference
- Exhibit – Annual Conference
- Full Attendee – Annual Conference

## Association of Environmental Engineering and Science Professors

- Advertising – AAEE Certification
- Editorial Exchange – To become ongoing
- Workshops/Seminars – Exploring Annual Conference co-sponsorship for 2011
- Other – Collaboration with AAEE Environmental Engineering Foundation on Brewster Snow Award and Pohland Award; AEESP leadership letter invites academics to apply for certification or recommend highly qualified Academics; development of Students & Young

Professionals activities. Participation at AEESP Meet & Greet (WEFTEC).

### National Society of Professional Engineers

- Advertisement – Certification
- Full Attendee at Annual Conference
- Exhibit at Annual Conference

### Solid Waste Association of North America

- Advertising – AAEE Wording/Logo on SWANA membership brochures and other publications; AAEE description/link on SWANA Web site
- Breakfast Presentation – SWANA Annual Conference
- Tabletop – AAEE materials distribution at SWANA Events
- Editorial Exchange – Annual general article; E3 Awards article

### Water Environment Federation

- AAEE Breakfast at WEFTEC
- AAEE Exhibit
- Full Attendee at Conference
- Advertisement of E3 Awards competition; promotion of NJWEA workshop

### Sponsoring Organizations – Chapter Collaborations

#### A&WMA

- Austin: Spring Environmental Law and Regulatory Symposium
- Cosponsor

#### AIChE

- Puget Sound Regional Conference on Sustainability
- Presentation on AAEE's Environmental Sustainability Certification

#### ASCE

- ASCE Baltimore Chapter – Web link; article about AAEE in newsletter

#### EWRI

- World Environmental & Water Resources Congress 2011 AAEE Short Course proposed (PDHs/CEUs)
- Advertising – cross promotions

#### AWWA

- Northern East Coast Chapters – promotion of AAEE Chesapeake Bay Workshop; promotion of Excellence in Environmental Engineering Awards Luncheon & Conference
- AWWA Florida Chapter – Cosponsor Student Luncheon at Univ. Central Florida
- Florida Water Resources Conference Breakfast presentation

#### NSPE

- NC Chapter – AAEE Seminar, Exhibit WEF
- CWEA – Luncheon presentation; Full-day preconference workshop proposed for 2011
- FWEA – Cosponsor Student Luncheon at Univ. Central Florida, Florida Water Resources Conference Breakfast presentation

- MWEA – Breakfast, Exhibit
- OWEA – Breakfast, Exhibit
- NJWEA Annual Conference – Full-day preconference workshop (PDH/CEU) at Annual Conference; Breakfast presentation, Exhibit, Full Attendee
- NYWEA – Breakfast presentation, Exhibit, Full Attendee
- Northern East Coast Chapters – promotion of AAEE Chesapeake Bay Workshop, promotion of Excellence in Environmental Engineering Awards Luncheon & Conference

### AAEE Independent Events

- AAEE Regional Meeting Metropolitan Water Districts of Southern California - AAEE Regional Event to be held.
- AAEE Chesapeake Bay Luncheon/Workshop (PDHs)
- AAEE Excellence in Environmental Engineering Awards Luncheon & Conference (PDHs)

### Other Activities

- Black Engineer of the Year Award Conference – Exhibit
- Earth Observation Forum IV – Cooperating organization; exhibit
- Engineer Week – Cooperating organization
- ASME Engineering Symposium – Cosponsor
- Hispanic Chamber of Commerce Washington, DC – Exhibit

## MEMBER NEWS

### Awards & Honors

**Glen T. Daigger, Ph.D., P.E., BCEE, NAE**, has been presented with Purdue University's 2009 *Civil Engineering Alumni Achievement Award*. This award is selected by Purdue University's senior faculty committee and approved by the entire civil engineering faculty to recognize an alumni's career achievements and contributions to the civil engineering profession. Dr. Daigger, Senior Vice President of CH2M Hill (Englewood, CO), has been board certified in Water Supply and Wastewater Engineering since 1995.

**Gordon R. Garner, P.E., BCEE**, has been selected as one of the 2010 recipients of the University of Kentucky, Department of Civil Engineering's *Civil Engineering Career Achievement Award*. This award recognizes civil engineers who have exhibited outstanding ability, integrity, service, ethical behavior, and significant achievement in their professional careers. Mr. Garner, who received both his B.S. and M.S. in Civil Engineering degrees from the University of Kentucky, is Vice President of CH2M Hill's Water Business Group (Prospect, KY). He has been board certified in General Environmental Engineering since 1987.

**Robert E. Sommerlad, P.E., BCEE**, has been selected as recipient of the 2010 *Pioneer Award*. The Pioneer Award, established by ASME and the University of Maryland's International Conference on Incineration & Thermal Treatment Technologies, was established to recognize outstanding leaders and sustained contributors in the field of Incineration and Thermal Technologies throughout the world. Mr. Sommerlad, Principal of Robert E. Sommerlad, P.E. (Gurnee, IL), has been board certified in Air Pollution Control since 1971 and is a Life Member.

### In Memoriam

**Robert J. Benson, P.E., BCEE**, passed away in July 2009. Mr. Benson, a Life Member, had been board certified in Water Supply and Wastewater Engineering since 1976.

**W. Wesley Eckenfelder, Jr., Sc.D., P.E., BCEE**, passed away in March 2010. Dr. Eckenfelder, Technical Director of Aqueter, Inc., had been board certified in Water Supply & Wastewater Engineering since 1975 and was a Life Member. *A tribute to Dr. Eckenfelder can be found on page 13 of this issue of Environmental Engineer.*

**Walter K. Johnson, Ph.D., P.E., BCEE**, passed away in December 2009. Dr. Johnson, who had previously been Professor of Civil Engineering at the University of Minnesota, was retired and had been board certified in Sanitary Engineering since 1965.

**Harvey F. Ludwig, Dr.Eng., P.E., BCEE**, passed away in April 2010. Dr. Ludwig, a Consulting Environmental Engineer in Thailand, had been board certified in Sanitary Engineering since 1956 and was awarded AAEE's Honorary Member in 1999. *A tribute to Dr. Ludwig*

*can be found on page 10 of this issue of Environmental Engineer.*


**Arthur H. Neill, P.E., BCEE**, passed away in February 2010. Mr. Neill, a Life Member, had been board certified in Sanitary Engineering since 1958.

**Robert W. Okey, Ph.D., P.E., BCEE**, passed away in February 2010. Dr. Okey had been board certified in Water Supply and Wastewater Engineering since 1997.

**August Thomas Rossano, Sc.D. P.E., BCEE**, passed in August 2009. Dr. Rossano, a Life Member, had been board certified in Air Pollution Control since 1957.

**John S. Stock, P.E., BCEE**, passed away in August 2009. Mr. Stock, a Life Member, had been board certified in Sanitary Engineering since 1968.

**Jerry C. Wilson, P.E., BCEE**, passed away in March 2009. Mr. Wilson, a Life Member, had been board certified in Water Supply and Wastewater Engineering since 1975. ☐



Take a different look at the history of Environmental Engineering through the life of a pioneer.

W. Wesley Eckenfelder, Jr. has dedicated 60 years to Environmental Engineering.

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\*see reviews at <http://www.wwepioneer.com>





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# *In Memoriam:*

## Harvey F. Ludwig, Dr.Eng., P.E., BCEE (1916-2010)

Many outstanding engineers and scientists have shaped our field since its inception. Harvey F. Ludwig was one of the legends.

The legend as a graduate student at Berkeley working with Professor Wilfred Langelier on coagulation, conducting some 5,000 jar-tests which resulted in landmark papers (AWWA Goodell Award, 1942; ASCE, Rudolph Hering Medal, 1953). As a professor at Berkeley (1949-51), he helped secure the land for what became the Richmond Field Station, forming at the same time a lifelong friendship with Professor Erman Pearson (1920-1985). His national legacy was due to shaping environmental legislation and policy during his years (1951-56) as assistant to Dr. Mark D. Hollis, Chief Sanitary Engineer, US Public Health Service. We live today with the legislative framework he helped build. This experience helped in advising governments in SE Asia on their own environmental legislation, but tailored to their special conditions. Harvey also presided over funding of research in sanitary engineering to selected universities which helped to establish the strong graduate programs from the mid-1950s through the '60s and which extended into the '90s. He had a role in establishing the Taft Sanitary Engineering Center building at Cincinnati, making sure that 'engineering' was in its name implying that an engineer would be named its director.

In 1957, Harvey and partner Joe Fee-ney founded Engineering-Science in Arcadia, California, with an office in Oakland. The firm and its reputation grew and, by 1966, had offices in Austin, TX, and Washington, DC. The business model for ES was to staff the firm with graduate level engineers and scientists and to offer designs and studies founded on science as opposed to traditional empiricism. He recruited graduates from his network of professors. By the mid-1960s, Harvey's name, accomplishments, prominence,

### *Dear All:*

*I am sad to tell you that Harvey passed away peaceful on the night of 24 April 2010. He was 94 years old. He was a great person, husband, father, and friend. He will be missed and we all love him.*

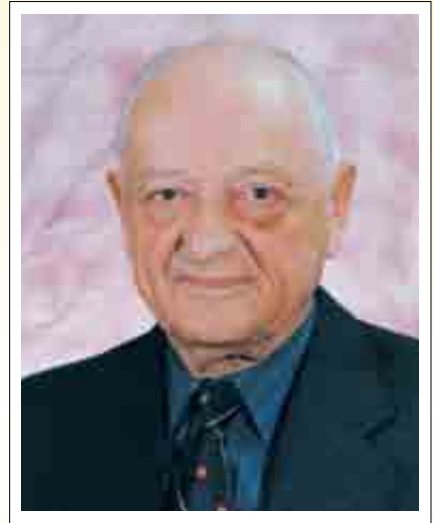
*Kind regards, Vanida Ludwig*

and the reputation of ES, were a part of the lexicon of those in the field. Harvey was mentor to a host of young engineers and scientists who would later emerge as prominent leaders, a role repeated later after moving to Bangkok.

Along the way, Harvey had had a role in virtually every major development in the field. He was still a player in the USPHS Division of Water Supply and Pollution Control through frequent phone conversations with the Chief, Gordon MacCallum, a long-time colleague, who later joined the firm and opened the Washington, DC office. Harvey led in the founding of AAEE (incorporated in 1955 as the American Sanitary Engineering Intersociety Board, ASEIB) and later supported the founding in 1963 of the Association of Environmental Engineers and Science Professors (AEESP) under the leadership of Prof. Erman Pearson, another legend, and some 18 members pro tem (also legends).

In 1968, as the reputation of ES was still rising, a sister company involved in construction encountered financial difficulties which swept into ES. The 'way out' was to be purchased by Zurn Industries with Harvey on the Board. This didn't work out and Harvey left the firm. Later ES was re-purchased by its employees.

In 1973, Harvey re-married and moved to Bangkok and started Seatec, which rose to preeminence in SE Asia. Following his instinct of seeing a problem and then trying to find a solution, Harvey



started the Asian Society of Environmental Engineers (ASEP).

Harvey's honors tell much about his standing in the field. He was elected to the National Academy of Engineering (NAE) in 1969, which of course speaks for itself. Previously, he had received major awards for accomplishments, e.g., the AWWA Goodell Award in 1942, the WEF Harrison Prescott Eddy Medal in 1954, the ASCE Rudolph Hering Medal in 1956 and again in 1959, an honorary doctorate from Clemson University in 1965. In 1999, Harvey was made an Honorary Member of AAEE and in 1999 was recognized as a University of California Distinguished Engineering Alumni.

Harvey also authored or coauthored some 300 papers and eight textbooks and other self-published books, e.g., *Book of the Two Puyings*, 1984, 150 pages. His 1985 autobiography, *Adventures in Consulting Engineering*, includes every detail of his life.

Harvey was a 'people-person' and was not reticent to express his opinion of others. In 1999 Harvey received the University of California Distinguished Engineering Alumni Award. Being recognized by his alma mater was probably as important to him as his NAE membership. He flew back from Bangkok for the

awards dinner, which was attended by some 200 colleagues, friends, and family. Harvey had his own award of recognition to colleagues deemed especially worthy.

The passing of Harvey Ludwig leaves a void in our profession, and in his family including his wife, Vanida, and five adult children. Harvey was disseminating his frequent emails (to over 60 friends, family, and colleagues) to within a few weeks of his passing. He had opinions on every issue including global warming, economic crises, education, the European Union, graft and what to do about it, appropriate technologies and environmental standards for developing countries (DCs), and more. He tried to advance the issue of appropriate technologies for 'DCs' at every opportunity, including writing textbooks on the topic. Harvey as a personality and as an engineer is not only a legend, but an institution. His influence continues.

Here are some details from his life and career as a leading environmental engineer for seven decades:

## Early years

- Born (1916) in Canada, grew up in Los Angeles (1920-1936)

## Education:

- BSCE University of California (1938)
- MSCE (1942)

## Career:

- US Public Health Service Commissioned Corps in WWII
- Ludwig Bros. Engineers (1947-49)
- Berkeley faculty (1949-51)
- USPHS (1951-56)
- Engineering-Science, Inc. (1957-72)
- Private consulting practice (1972)
- Seatec International in Bangkok (1973-2004)
- Private consulting practice (2004-2010)

## Memberships:

- ASCE, WEF (Director 1966-69), AWWA, AAEE, AEESP, ASEP and APHA
- Conference of US Federal Sanitary Engineers
- Cosmos Club
- Bengal Club of Calcutta
- President, California WEA (1965)

## Honors:

- Phi Beta Kappa, Chi Epsilon, Tau Beta Pi, Delta Omega and Sigma Xi
- AWWA John M. Goodell Award with W. F. Langelier (1942)
- WEF Harrison Prescott Eddy Medal (1954)
- ASCE Rudolph Hering Medal (1953 and 1956)
- Honorary doctorate degree, Clemson University (1965)
- Elected to National Academy of Engineering [NAE] (1969)
- Named a Distinguished Engineer Graduate of UC Berkeley (1999)
- Honorary Member of AAEE for Eminence in the Environmental Engineering Profession (1999)
- AEESP/AAEE Special Joint Award for services as a principal founder of both organizations at Clarkson University (2005)
- Bindu Lohani Special Award as the Distinguished Environmental Engineer of the Century (2005)
- Asian Society for Environmental Protection Special Award
- Recognized by Parson's Engineering-Science as co-founder for "A new vision for the field of sanitary engineering solving environmental problems with combined knowledge of engineers and scientists".
- Seatec International and SKM Engineers (Australia): "The Cornerstone of the Environmental Movement of Southeast Asia since the Early 1970s" (1985)

## Helped:

- Fund AAEE (while with the USPHS), AEESP and Asian Academy of Environmental Engineers (1980s)
- Form National Environmental Board of Thailand (1973)
- Establish a major R&D center at ES
- Establish a company newsletter containing a comic strip featuring the engineer-as-hero to communicate engineering to the public
- Establish ES and later SI special certificates to honor distinguished colleagues.
- Establish bank financing contacts for leaders of some less developed countries to improve their infrastructures

- Seatec International trained Thai engineers who later established their own firms
- Develop innovative designs for upgrading of village environment in slum areas of Jakarta to give incentives for residents to upgrade their homes to match the improved quality of infrastructure
- With refuse disposal issues to match local conditions in Bangkok
- Establish the institution of a local 'water czar' in Chinese cities where severe water shortages exist, which has avoided expensive importation

## Publications:


- Autobiography: *Adventures in Consulting Engineering*, 1985, 250 pages.
- *Book of Essays: A to Z* (on Harvey Ludwig's views and philosophies; four volumes, 200 pages each volume, published in 2002, 2005, 2007, 2009).
- Professional Memorabilia (several volumes).
- HFL Career Summary

## Personal Books:

- *Book of the Two Puyings*, 1984, 150 pages (fairy stories featuring daughters Wanee and Yingtoy)
- *Book of Special Letters*, 100 pages (letters about HFL written by others)
- *Book of Songs for Birthdays* (of Wanee and Yingtoy with lyrics matched to popular songs tailored for each girl)
- *Book of Artifacts at 1459* (photos plus descriptions of artifacts in Bangkok home including paintings, rugs, vases, wood carvings, etc.)
- 8 textbooks (5 as sole author, 3 as co-author)
- 300 published papers on sanitary/environmental engineering (approximate)

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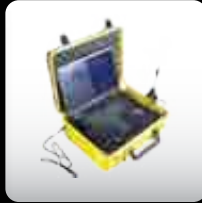
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# *In Memoriam:*

## W. Wesley Eckenfelder, Jr., Sc.D., P.E., BCEE (1956 to 2010)

**W**. Wesley Eckenfelder, Jr. was a unique man. He was a pioneer in the field of wastewater treatment technology and a genius with the ability to carry on a normal conversation with anyone. A teacher, yet he never stopped learning. An entrepreneur for he stepped outside the borders of what he was taught and tried new ideas that led to new discoveries and techniques. His work, students, colleagues and clients composed his life, but his life was not all work – he had fun and lived life to the fullest. There was never a dull moment with Wes. His great sense of humor became cherished memories and unforgettable lessons for hundreds. He was a kind and generous man who thought of others. He gave to those who were willing to help themselves and gave back to those who helped him.

In later years, his vision and health started failing, but that did not stop him from working, teaching or learning. He could solve a problem and derive a complex formula in his mind's eye, then put it down on paper for others to see. He never stopped working and continues to work through those he taught, as well through the many books and papers he wrote.

Wes was a man who helped the world's environment and impacted many peoples' lives. He is a man that can't be replaced and will never be forgotten.

– Sharon Crossman

He was a gentleman, professor, scientist, engineer, counselor, father, husband, and an especially good friend. He was a scholar who had the rare ability to combine science and engineering in remarkable new ways. He combined soil bacteriology and sanitary engineering into a field of work that led him to become known internationally as "The King of BOD," a title he relished. Wesley taught the world how to conquer the most chal-

lenging waste water pollutants with his pioneering work.

Wesley had a formidable drive and he accomplished much. He became the world's leading authority in industrial water quality management, and is responsible for cleaning up more rivers, lakes and natural waters world-wide than any other person. He never retired from the work he loved so much and was actively working on industrial wastewater projects and drafting another textbook mere days before his passing.

Wes was a singularly excellent teacher, a true professor emeritus. He gave his students his undivided attention and advised them well, with a view to their personal path and success. He always made time for others. Wesley loved life, he loved people and he lived large, eagerly exploring what life had to offer. He traveled far, saw much and met the peoples of the world, earning the trust and esteem of thousands. His status as the premier international authority on water pollution control was well deserved.

When you were with Wesley Eckenfelder, you found yourself engaged in wonderful conversation, illuminating thought and likely a good drink to boot. If there is a bar in Heaven, Wes will be found there holding forth with his wry grin and Manhattan drawl, a twinkle in his eye, his glass half full, and a heck of a story to tell. God bless your wonderful, generous and noble life, Wesley. You are sorely missed, my friend.

– William Ney Hansard,  
CET, CHMM, REA

Dr. Eckenfelder's death marks the end of an era in the environmental engineering profession. Everyone associated with this profession knew or knew of Wes. Those of us who knew him personally will be forever indebted to him for the wisdom and knowledge that he passed on and



the contribution that our association with him made to our careers. His name will be forever linked to the field and particularly industrial wastewater treatment. Professor Eckenfelder embodied the nexus between academics and practice of industrial water pollution control. It was his unique way of making activated sludge theory come alive through his personal experience and practical application that set him apart and elevated his stature in the field. Wes was an inspiration to everyone whose lives he touched personally and professionally.

– Kenneth N. Wood

Wes was the 'gray hair' at AWARE, the mentor to all of us recently-graduated students who came to work there in the '70s. At a time when there were lots of egos in the rapidly growing environmental field, he was great to work with – instructive, accepting of all of us who, at the time, had no stature in the field and were much less experienced than he, and forgiving of our mistakes borne of more confidence than experience. Despite his international reputation, his ego was never a factor in dealing with us.

– Dr. John H. Koon, P.E., BCEE

I was perhaps only a second or third generation person to have interacted with Wes – via his close relationship with Jim Patterson, my MS mentor, and Cecil Lue-Hing. It was a true joy to read his autobiography, and a blessing to those yet younger still.

During my MS at IIT, Wes gave a seminar at IIT, and was asked a question about

how EPA went about setting categorical pretreatment standards. He thought about it for about 15 seconds, and with the best of his oratorical use of his stutter he gave an answer “By communing with god in the restroom.”

– Dr. Charles “Chuck” Haas, BCEEM

Wes was a valued colleague of so many, a trusted friend and a great professional. It is indeed a very sad passing.

– Dr. Richard “Dick” Speece

We lost a great man, colleague and friend. He was a giant and known as ‘the godfather’ in the industrial waste profession. He influenced and taught thousands of engineers and scientists through his books, workshops and courses. His lectures were the best and always entertaining. He was truly one-of-a-kind and a living legend. He’ll be greatly missed.

– Joe Cleary, P.E., BCEE

Not only was Wes my Professor, but also my friend. I was very proud to be one of his students and for the mentoring I received from him. He instilled confidence in his students and his door was always open. He will always live in our hearts. His profound influence on our field will be with us and the younger generation for a long time to come. Farewell Wes.

– Dr. James Barnard, Pr.Eng., BCEE

Unfortunately, this is the second friend named Eckenfelder that I have lost. The other was his son Larry, who was a Beta Theta Pi brother of mine at Vanderbilt.

Wes gave me my first paying job in this field – as a research tech at Vandy when I was a senior and took an independent study course under Wes (for which I also received two semester hours credit and an ‘A’). Of course, I had to work on weekends for a slave-driver Ph.D. student of Wes’ by the name of Meint Olthof.

Dr. Jeff Pintenich, P.E., BCEE

Not only was he a great leader in our field, but a darn nice guy who treated others kindly. He has left so many of us with fond memories.

– Dr. David Stensel, P.E., BCEE

He was a great all-round person who made complex things look easy. He helped so many people not only with technology, but even with a philosophy of life! We will all miss him anytime a tough problem arises and you need someone to make a technical presentation that all can understand. His memories will be around for years through his presentations, books and many students and colleagues. I remember when we lost one proposal and his comment was, “You win some and you lose some, get on with the next proposal.” May his soul rest in peace!

– Dr. Ajit Ghorpade

Wes will live on in all the memories and the people he has touched. Glen Daigger offered a toast to Wes and his great contributions at the Wastewater Modeling Conference in Quebec recently.

– Krishna Pagilla

I’m sad because I have lost the person that has changed my family’s life; the adviser that was always there for me; the teacher that was always challenging and rewarding me; and the friend with whom I have shared trips, meals, and a beer or a glass of wine. On the other hand, I’m relieved because his suffering has ended. He will always be in my heart! May his soul rest in peace!

– Victor Boero

This is very sad news. Wes and the late Pete Krenkel have touched me in several ways, both personally and professionally. I met Wes first in 1969 at Prague’s IAWQ Conference where he was a keynote speaker and then again a month later in Wroclaw at a WHO (World Health Organization) workshop. This sealed my destiny and I joined Vanderbilt the same year. Both Wes and Pete became my teachers, mentors, friends and employers during a very difficult time of my life in the early ‘70s when they hired me as one of the first employees. My ‘happy ending’ is thanks to them and their friendship and guidance 40 years ago.

– Dr. Vladimir Novotny, P.E., BCEE

To have so many friends is certainly the sign of a successful life!

– Dr. Glen T. Daigger, P.E., BCEE

Not only was he a wonderful human being, but he made the field of ‘Environmental Engineering’ possible for the rest of us. He was in the trenches when it wasn’t fashionable. We all owe him a great debt of gratitude for his willingness to persist on our behalf. He will be missed by all who knew him and by those who will follow in the future who did not get a chance to interact with him.

– Dr. George Tchobanoglous, P.E., BCEE

We and the profession have lost an irreplaceable friend and colleague.

– Dr. A.J. Englands, P.E., BCEE

It is not often that one has the opportunity to meet, let alone learn from, a person of his knowledge and stature. His legacy is the thousands of engineers that he taught. His contributions to society will endure forever. May his memory be eternal!

– Jim Watkins

AIDIS ARGENTINA wants to be present at this unfortunate moment to bid Wesley Eckenfelder farewell. Wes, master of masters, will be remembered with eternal appreciation for his intelligence, dedication and gentlemanly manners. These words are our gratitude for his commitment and dedication on behalf of our associates and professionals in Argentina. Our most heartfelt condolences to his loved ones hoping you find in his memory the comfort you need.

– Ing. Pablo Schifini

Wes Eckenfelder gave me the education, opportunity, and friendship that nobody in my life can even compare. I will miss him dearly, my professor and my friend.

– Walter Chiang, P.E.

He will be missed very, very much.

– Dr. Jeff Pintenich, P.E., BCEE

This is truly a sad day – one of the greatest is lost to us. Wes was a good friend to so many of us and mentored so many of us – it is difficult to realize that he is gone.

– Frank Agardy

I am deeply saddened by the news.  
– Dr. Chriso Petropoulou, P.E., BCEE

I am shocked at the sad news of his passing. We will miss Wes, but honor him by remembering him.  
– Dr. Norbert Schmidtke, P.E., BCEE

I have known him over the years, since 1964, as a very insightful and sharing person. He has a very loyal and dedicated following.  
– Dr. Andrew W. Loven, P.E., BCEE

My friends at Brown and Caldwell forwarded your email about Wes' passing to me. Like all of us I held Wes in the highest regard and fortunately I had the pleasure of getting to know him personally.  
– Mark W. Tenney

What a loss. It's hard to imagine the world without Wes in it. He was bigger than life!  
– Christy Lewis

This was saddening and surprising news – the latter because he and Joe

Clearly were working on a book for my company. He was a guy who combined brilliance, kindness and fun; a person who not only wrote books but was part of a lot of great stories. I consider it an honor to have known him.  
– Joe Eckenrode

I remember him as a generous and open-minded teacher who was always trying to show the way to his students. I was able to enjoy his seminar at Vanderbilt and his lectures here in Argentina. He will remain among us in his thoughts and ideas.  
– Jorge Durán

From the Argentine National Institute of Water, please accept our heartfelt sincere condolence on the death of Dr. Eckenfelder who years ago transmitted knowledge of environmental engineering to Latin-America's young professionals.  
– Luis E. Higa


I probably read or made use of all of his textbooks over the years. Most recently, having retired from the real world

at ADI Systems, I became an Adjunct Professor in Industrial Wastewater Treatment at the University of New Brunswick in Canada where I taught a grad course in industrial wastewater treatment and used a signed copy (04/13/05) of his most recent text *Industrial Water Pollution Control*. I'm sad that Wes has joined the dearly departed. There's no doubt that he influenced a whole boatload of engineers – and not just in the US.  
– Robert C Landine

I met Wes the first time when he agreed to do our breakfast presentation at AIChE last year. He was a good guy. I'll always remember him.  
– Joseph S. Cavarretta, CAE


Note from Editor  
Thank you to Sharon Crossman for her assistance in assembling this tribute. Ms. Crossman is a graphic designer and worked with Dr. Eckenfelder on his memoirs, *W. Wesley Eckenfelder: Waste Water Extraordinaire*. For information on how to obtain a copy and for an online tribute, go to [www.wwepioneer.com](http://www.wwepioneer.com). EE

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Robert F. Montgomery.....Martinsburg, WV	Karl B. Schnelle.....Brentwood, TN	Ira L. Whitman.....East Brunswick, NJ
Melissa C. Moran.....Indianapolis, IN	Jerald L. Schnoor.....Iowa City, IA	Robert C. Williams.....Norcross, GA
James M. Morgan.....Lexington, VA	Robert J. Schoenberger.....Downington, PA	Charles A. Willis.....Charlotte, NC
J. Victor Morris.....Canada	Henry G. Schwartz.....St. Louis, MO	Malvin Wolkstein.....Springfield, NJ
J. D. Norman.....Mexico	Robert F. Schwartz.....South Orange, NJ	Joseph Ming-Lup Wong.....Richmond, CA
John W. Norton.....Dayton, OH	Edgar F. Seagle.....Rockville, MD	Thomas Wong.....Houston, TX
M. E. Nosanov.....Oceanside, CA	Paul R. Shea.....Denver, CO	Paul H. Woodruff.....Exton, PA
Glenn L. Odom.....Jackson, MS	Timothy G. Shea.....Chantilly, VA	James C. Young.....Springdale, AR
Charles R. O'Melia.....Baltimore, MD	Ranjit Sinha.....Kendall Park, NJ	Jehangir Zakaria.....Virgin Islands
		Hooshang Zeyghami.....Weston, WI

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## KAPPE LECTURE

Rudolph Bonaparte.....Atlanta, GA	
Jeanette A. Brown.....Darien, CT	
Keith E. Carns.....Oakhurst, CA	
Jeffrey J. Chen.....Palo Alto, CA	
Richard F. Cole.....Brookeville, MD	
Paul A. Dombrowski.....Holyoke, MA	
Carl W. Eklund.....Kirkwood, MO	
Matthew J. Flanagan.....Westmont, NJ	
Davis L. Ford.....Austin, TX	
Ralph C. Graber.....Annapolis, MD	
Michael C. Kavanaugh.....Emeryville, CA	
Harlan G. Kelly.....Canada	
Cecil Lue-Hing.....Burr Ridge, IL	
Ulf M. Lindmark.....Harbor City, CA	
Charles Liu.....Dix Hills, NY	
Shyam S. Mohanka.....Schenectady, NY	
Edward W. Monroe.....Pittsburgh, PA	
Charles F. Niles.....Valrico, FL	
William A. Rosenkranz.....Alexandria, VA	
Michael R. Rothberg.....Denver, CO	
Jon M. Rueck.....Silver Lake, KS	
Michael K. Stenstrom.....Los Angeles, CA	
C. Joseph Touhill.....Jamison, PA	
N.C. Vasuki.....Dover, DE	
Robert W. Wheeler.....Morgantown, WV	
Ira L. Whitman.....East Brunswick, NJ	
Yuefeng Xie.....Middletown, PA	
George A. L. Yuen.....Honolulu, HI	

# ENVIRONMENTAL ENGINEERING FOUNDATION

## »» Members of AAEE

The purpose of this communication is to introduce you to the Foundation which AAEE has established so that you can begin to plan your support for it. It is called the Environmental Engineering Foundation (EEF). It was established as a result of strategic planning by AAEE, with the purpose of providing a tax-exempt vehicle for the Academy to collect funds to expand the Academy's activities in support of Environmental Education. The Mission of the Foundation, as listed on its website at <http://www.EnvironmentalEngineeringFoundation.org> is:

*"Advancing the stature and practice of Environmental Engineering by promoting the profession, educating the public, assessing issues, and recognizing professional achievements."*

The Foundation Board of Directors has been working with the appropriate AAEE committees to define the activities to be supported, which will include support for the development of local student chapters of AAEE and partnering with other engineering organizations to add Environmental Engineering to their outreach to K-12 students. We will provide more in coming months on the specific activities.

The Foundation will be reaching out to numerous sources of funding for these activities, but one critical source is the members of AAEE. You may ask why we are coming to you as all of us already receive more requests of this type than we can afford to respond to. There are two reasons for this. One is that, as the leaders of the Environmental Engineering profession, we have the first responsibility to



support these efforts. The second is that we (the Foundation) need to be able to demonstrate that you core leaders judge this to be sufficiently important that you will put your own money into these efforts. So, we need your help so that we can do our job – for you!

At this point we are not asking you to donate, although we are fully functioning and able to receive any tax-exempt charitable donations that you might like to give. We understand that we have not yet been sufficiently specific about how the funds we are asking for will be used. We are still in the process of developing those details. What we are asking you to

do is to begin including the Foundation in your charitable giving plans for 2010 and beyond so that, when we come to you in the second half of the year with request to support specific programs, you are prepared to do so. With 2,500 members of AAEE, we would hope to raise money (let's say that one-third of AAEE members donate \$25 this year – with a membership of about 2,500 this would amount to about \$20,000) this year to initiate these activities. In return, the Foundation promises to report back to you the good works that this allows the Academy to accomplish and how the Foundation is able to leverage your investment in our Profession that other sources of funding your donations will allow us to access.

So, please keep this in mind as your begin to plan your charitable giving for 2010 (and beyond). If you have questions, certainly access the Foundation website <http://www.EnvironmentalEngineeringFoundation.org> or feel free to contact any member of the Foundation Board of Directors. Thank you in advance for your critically important support for these initiatives. EE

**Signed by EEF Board of Director members.**

**Charlie A. Willis, P.E., BCEE**  
President

**Joseph S. Cavarretta, CAE**  
Secretary & Ex-Officio Member

**Alan H. Vicory, Jr., P.E., DEE**  
Vice President

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**Deadline to be a sponsor is September 15, 2010**

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Make checks out to Environmental Engineering Foundation/K-12 Contest



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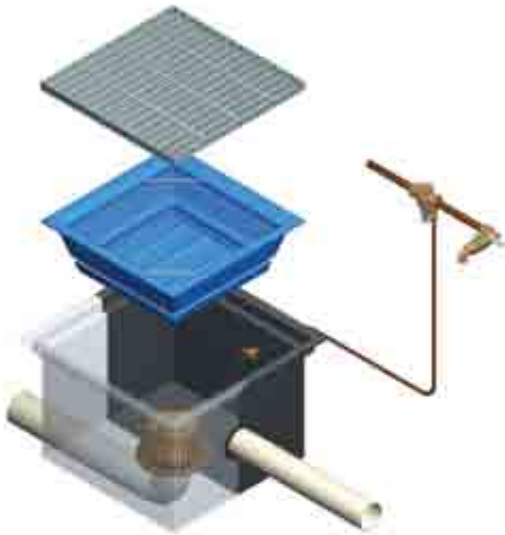
## Times have changed

You can no longer afford waste in your waste treatment. In most cases, low priced floating aerators means cheap aerators that give you low performance and high maintenance cost. Low performance means high utility bills and not meeting discharge requirements.

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Can't afford new aerators or repair to your existing aerators, not a problem. EEE, Inc. will finance your purchases and repairs until the money is available. Electric costs are ongoing but they will be less with the more efficient EEE, Inc. Floating Aerators.

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Fox manufactures a unique range of valves that allow wash down operations to take place in unroofed, open areas without harm to the environment.


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The Fox system will accommodate anything from small simple wash bays to large open areas that will require First flush volumes to be removed. Systems can also be design to detect spills of hydrocarbons and other liquids. Stormwater closure models are also available. Along with their unique diversion system Fox manufacture a range of Oil water separators that treat effluent before disposal to the sewer network. Separators can be supplied with flow rates from 1000 l/ph up to 20000l/ph. All units are built in Stainless steel.

## Application

- Truck & Auto wash pads
- Container wash bays
- Military application
- Marinas
- Aircraft wash facilities
- Trash Bin wash areas
- Emergency Showers
- Rental car agencies





# Top Employers and Recruiters

## of Board Certified Environmental Engineers & Board Certified Environmental Engineering Members in 2009

Over the past year, the Academy has seen a 3.6% growth in the number of new Board Certified Environmental Engineers and Board Certified Environmental Engineering Members. Last year, 134 men and women passed their exams and were certified by the Academy.

The vast majority of that new class came to us not on their own, but because they were encouraged to apply for specialty certification by someone else. In many cases, a Board Certified Environmental Engineer or Board Certified Environmental Engineering Member simply asked a qualified fellow environmental engineer, "Have you considered becoming board certified?" In many other cases, an environmental engineer's employer encouraged them to seek credentialing by the Academy.

In 1999, the Academy initiated the Professional Development Program (PDP) with environmental consulting firms to provide for the systemic professional development of environmental engineers from new graduates and extending through specialty certification and beyond. The PDP is customized by each participating firm according to its specific human

The Top Ten			
Current Rank	Organization	Number of BCEEs/ BCEEMs	
1	CDM*	305	1
2	Malcolm Pirnie, Inc.*	131	2
3	Mississippi DEQ	49	3 (tie)
4	Stearns & Wheeler, LLC	45	3 (tie)
5	CH2M Hill	42	3 (tie)
6	LA Sanitation Districts	36	5 (tie)
7	Brown & Caldwell	32	5 (tie)
8	MWH	28	6
9 (tie)	HDR	22	7
9 (tie)	PBS&J	22	4
*denotes participating firm in PDP			

resources needs and practices. As a part of this customization, the participating firms provide appropriate support and tangible incentives for program participants.

To date, eight firms have committed themselves as participants in the PDP. In 2002, the Academy further strengthened its recruiting efforts by kicking off the *More is Better* campaign. This past year, the Academy ran the *Make a Difference* campaign. Combined, these three efforts have gone a long way in rejuvenating interest in Academy membership and specialty certification.

Listed on this page are the Top Ten Employers of Board Certified Environmental Engineers and Board Certified Environmental Engineering Members in 2009 as well as the five organizations that recruited the most new Board Certified Environmental Engineers and Board Certified Environmental Engineering Members during the same period. The Academy would like to recognize and thank those employers for their continued support.

The Academy would also like to thank each and every member who has taken the time to recruit new Board Certified Environmental Engineers and Board Certified Environmental Engineering Members and continues to do so. Your efforts are greatly appreciated. Each new person that earns their specialty certification adds credibility to the BCEE and BCEEM designations by making it that much more recognizable as a distinguishing characteristic within the environmental engineering profession. EE

Professional Development Program as of December 31, 2009
CDM
ERM - Environmental Resources Management
Hazen and Sawyer
HDR Engineering, Inc.
Malcolm Pirnie, Inc.
PBS&J
Stearns and Wheeler
The Stover Group

Top 5 Recruiters	
Organization	Number of New BCEEs & BCEEMs in 2009
CDM*	27
Malcolm Pirnie, Inc.*	24
LA Sanitation Districts	4
Mississippi DEQ	3
Stearns & Wheeler*	3
*denotes participating firm in PDP	



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## Excellence in Environmental Engineering®

# 2011

The Excellence in Environmental Engineering® Competition singles out those projects or programs which testify to the genius of mankind for recognition. Its criteria define what it takes to be **the best**: a holistic environmental perspective; innovation; performance and customer satisfaction; and contribution to an improved quality of life and economic efficiency.

Now in its 22nd year, the E3 Competition now accepts entries in the following categories: **Design, Environmental Sustainability, Operations/Management, Planning, Research, Small Firms, Small Projects, and University Research**. Prize-winning entries are automatically eligible to enter the International Water Association's Project Innovation Awards global competition. Entry deadline is February 1, 2011.

To obtain complete entry guidelines and submission forms, go to <http://www.aeee.net>.



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Design • Environmental Sustainability • Operations/Management • Planning • Research • Small Firms • Small Projects • University Research

Design • Environmental Sustainability • Operations/Management • Planning • Research • Small Firms • Small Projects • University Research



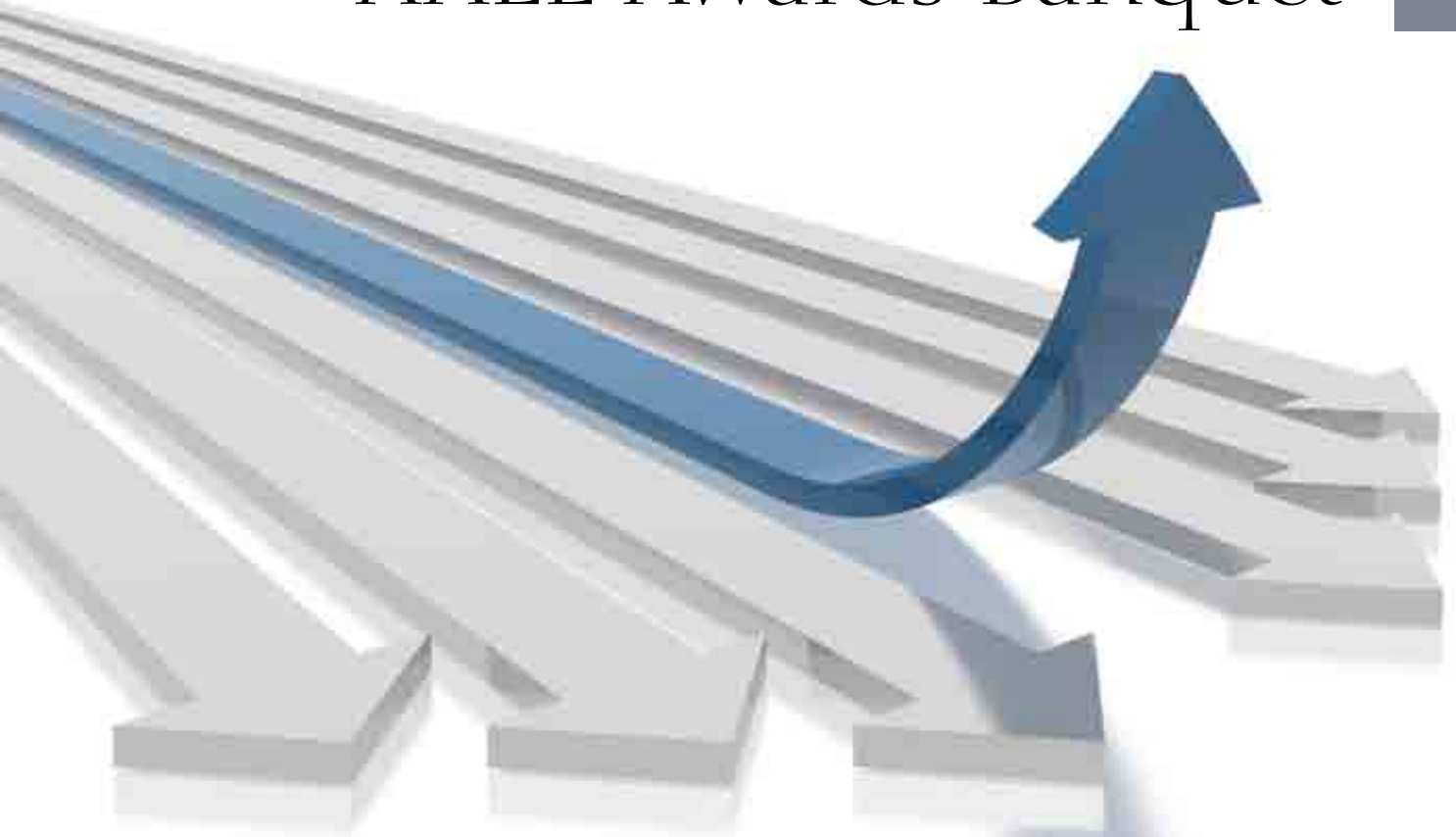
## OUR CONCERN FOR **THE ENVIRONMENT** IS MORE THAN JUST TALK

As we continue to deliver valuable information through the pages of this magazine, in a printed format that is appealing, reader-friendly and not lost in the proliferation of electronic messages that are bombarding our senses, we are also well aware of the need to be respectful of our environment. That is why we are committed to publishing the magazine in the most environmentally-friendly process possible. Here is what we mean:

- We use lighter publication stock that consists of recycled paper provided by an FSC Certified supplier. This Forest Stewardship Council (FSC) standard ensures that our paper comes from efficiently managed forests with proper replanting programs that make this a RENEWABLE and SUSTAINABLE resource.
- Our computer-to-plate technology reduces the amount of chemistry required to create plates for the printing process. The resulting chemistry is neutralized to the extent that it can be safely discharged to the drain.
- We use vegetable oil-based inks to print the magazine. This means that we are not using resource-depleting petroleum-based ink products and that the subsequent recycling of the paper in this magazine is much more environment friendly.
- During the printing process, we use a solvent recycling system that separates the water from the recovered solvents and leaves only about 5% residue. This results in reduced solvent usage, handling and hazardous hauling.
- We ensure that an efficient recycling program is used for all printing plates and all waste paper.
- Within the pages of each issue, we actively encourage our readers to REUSE and RECYCLE.
- In order to reduce our carbon footprint on the planet, we utilize a carbon offset program in conjunction with any air travel we undertake related to our publishing responsibilities for the magazine.

*So enjoy this magazine...and **KEEP THINKING GREEN.***

# The 40th Annual AAEE Awards Banquet



The 40th Annual AAEE Awards Banquet was held on April 28, at the National Press Club in Washington, D.C. >>>>



## THE 40th ANNUAL AAEE AWARDS BANQUET



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A Champagne Reception kicked off the festivities, giving time for the attendees to view panels of award-winning projects. AAEE's leadership was well represented, as well as the environmental engineering community. Among the dignitaries in attendance were Peter Adriens, President of American Public Works Association; Peter King, Executive Director of the American Public Works Association; Brian Parsons, Executive Director of the Environmental & Water Resources Institute of ASCE; Lawrence Jacobson, Executive Director of National Society of Professional Engineers; and Mike Milligan, Executive Director of Accreditation Board of Engineering and Technology. Stephen R. Maguin, served as the Master of Ceremonies for this year's event.

Major General Jeffrey Talley, Ph.D., P.E., former Associate Professor of Environmental Engineering at Notre Dame University and now Chair and Professor, Department of Environmental & Civil Engineering Southern Methodist University, Bobby B. Lyle Professor of Leadership and Global Entrepreneurship, Founding Director, Hunter and Stephanie Hunt Institute for Engineering and Humanity was this year's keynote speaker. The title of

Major General Talley's presentation was *Building Communities: Baghdad and Beyond*.

Four individuals were recognized and presented with awards for their excellence and leadership in the environmental engineering profession:

1 Laurens Van der Tak, P.E. (CH2M Hill) was on hand to accept two awards. The Grand Prize-Design was accepted on behalf of the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) (Albuquerque, New Mexico) for their project, San Juan-Chama Drinking Water Treatment Plant. The Honor-Design award was accepted on behalf CH2M Hill for Pine Creek Wastewater Treatment Plant (Calgary, Canada).

2 Greeley and Hansen won Grand Prize-Design for their project, Richmond's Rapid Sewer Flood Relief (Richmond, Virginia). On hand to accept were (left to right): Wayne Lassiter (City of Richmond Department of Public Utilities), Jennifer Keeler (Greeley and Hansen), Engineer-in-Charge Federico Maisch, P.E., BCEE (Greeley and Hansen), and Chris Beschler (City of Richmond Department of Public Utilities).





George R. Crombie was presented with the 2010 Honorary Member Award by Treasurer Howard LaFever, P.E., BCEE. The Honorary Member Award is given to an individual in recognition of their position of eminence in the environmental engineering field and their sustained contributions to the

**3** ENTRIX, Inc. won Grand Prize-Environmental Sustainability for their project, Marco Island Aquifer Storage and Recovery System (East Naples, Florida). Engineer-in-Charge Lloyd Horvath, P.E. (ENTRIX, Inc.) and A. Rony Joel, P.E., BCEE (City of Marco Island) accepted the award.

**4** The District of Columbia Water and Sewer Authority (DCWASA) won two Grand Prize awards. The Grand Prize-Research Award for Chesapeake Bay Initiative Inspires the Development of a Sustainable Wastewater Purification Technology, Washington, D.C., was entered in conjunction with AECOM Technology Corporation. On hand to accept the award was Sudhir Murthy (DCWASA) (front-left). The Grand Prize-Operations/Management for Blue Plains AWWTP Nitrogen Removal Program, Washington, D.C., was accepted by Aklile Tesfaye, P.E., BCEE (DCWASA) (front-right). Walter F. Bailey, Jr., P.E., BCEE (DCWASA) (back row-center) served as Engineer-in-Charge for both projects.

**5** Federico Maisch, P.E., BCEE, accepted the Grand Prize-Planning Award on behalf of Greeley and Hansen for Regional Optimization Master Plan (Pima County, Arizona.)

**6** Executive Director Joe Cavaretta congratulates Grand Prize-Small Projects winner Malcolm Pirnie, Inc., for Colorado Radionuclide Abatement and Disposal Strategy Project (Denver, Colorado). Engineer-in-Charge Jason Kersiens, P.E. accepted the award accompanied by Richard J. Pope, P.E., BCEE, Project Officer with Malcolm Pirnie.

**7** AAEE President Cecil Lue-Hing presents Institut National de la Recherche Scientifique, Centre Eau, Terre & Environnement (INR-ETE) with the award for Grand Prize-University Research for Value-Added Products Through Bioconversion of Wastewater and Wastewater Sludge (Quebec, Canada). Accepting was Rao Y. Surampalli, Ph.D., P.E., BCEE, one of the Engineers-in-Charge. Dr. Surampalli was also the 2010 recipient of the Gordon Maskew Fair Award.

**8** CDM won Honor-Design for Haworth Water Treatment Plant Upgrade (Haworth, New Jersey). On hand to accept the award were Tom McNeice, Steve Rafferty, and Engineer-in-Charge Peter Tunncliffe, P.E., DBIA, BCEE



## THE 40th ANNUAL AAEE AWARDS BANQUET



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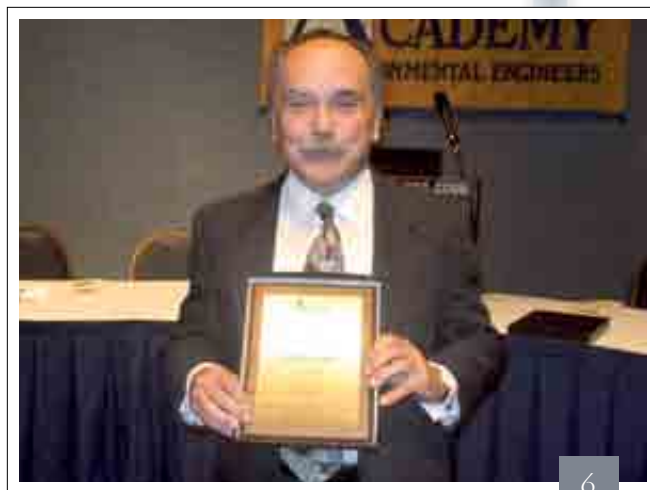
advancement of environmental engineering. Mr. Crombie, a Senior Faculty Member for Public Works Administration in the School of Graduate Studies at Norwich University, is currently President-Elect of the American Public Works Association.

Vice President Michael W. Selna, P.E., BCEE, was presented with the 2010 Stanley E. Kappe Award by President-Elect Brian P. Flynn, P.E., BCEE. The Stanley E. Kappe Award is presented to an individual for their performance of extraordinary and outstanding service contributory to the advancement of the Academy objectives. Mr. Selna, Senior Advisor of the Sanitation Districts of Los Angeles County, has been board certified in Water Supply and Wastewater Engineering since 1996.

Rao Y. Surampalli, Ph.D., P.E., BCEE, F.AAAS, DIST.M.ASCE, was presented with the 2010 Gordon Maskew Fair Award by President Dr. Lue-Hing. This award is presented to an individual for substantial contributions to the status of the engineering profession, the quality of

the world's environment, and the Academy. Dr. Surampalli, Engineer Director with the US Environmental Protection Agency, has been board certified in Water Supply and Wastewater Engineering since 1985.

- 1 Engineer-in-Charge Webster Owen, Jr., P.E. was on hand to accept the Honor-Design for Hangtown Creek Water Reclamation Facility - 2005 Facility Improvements (Placerville, California).
- 2 Metropolitan Water District of Southern California won Honor-Environmental Sustainability for the Inland Feeder Program (Los Angeles, California). John Morris accepted the award.
- 3 President Lue-Hing presents the Honor-Environmental Sustainability to Don Vogt, P.E., BCEE. He accepted the award on behalf of PBS&J for Rothenbach Park Landfill Site Reutilization Project (Sarasota, Florida).
- 4 Stearns & Wheeler GHD won Honor-Environmental Sustainability for Cornell University Renewable Bioenergy Initiative (Ithaca, New York). Engineer-in-Charge Wayne E. McFarland, P.E., BCEE, accepted the award.



Stephen R. Maguin, P.E., BCEE, was presented with the 2010 Edward J. Cleary Award by Past President Debbie Reinhart, Ph.D., P.E., BCEE. The Edward J. Cleary Award is presented to an individual who displays superior administrative and technical skills and public service in the conduct of environmental protection programs. Mr. Maguin, Chief Engineer and General Manager of the Sanitation Districts of Los Angeles County, has been board certified in Solid Waste Management since 1995.

Nineteen winners were announced for the 2010 Excellence in Environmental Engineering Competition. Design had five winners, including a tie for Grand Prize. Awards were presented to:

- **Grand Prize:** Albuquerque Bernalillo County Water Utility Authority (ABCWUA) for San Juan-Chama Drinking Water Treatment Plant (Albuquerque, New Mexico). Michael A. Brewer, P.E., was the Engineer in Charge.
- **Grand Prize:** Greeley and Hansen for Richmond's Rapid Sewer Flood Relief (Richmond, Virginia). Federico Maisch, P.E., BCEE, was the Engineer in Charge.

**5** The Sanitation Districts of Los Angeles County won the Honor-Operations/Management award for IERCA - A Regional, Cost-Effective Approach to Sustainable Organics Management, (Rancho Cucamonga, California). On hand to accept the award were Richard Atwater and Patrick Shields.

**6** David Ashley accepted the Honor-Planning Award on behalf of Jordan, Jones, & Goulding, Inc., for US 411 Connector Environmental Impact Statement and Supporting Engineering (Bartow County, Georgia).

**7** President Lue-Hing congratulates Honor-Research winners, Geosyntec Consultants for Microbial Risk Assessment for Recreational Use of the Chicago Area Waterways (Chicago, Illinois). On hand to accept the award were: (back row) Dr. Lue-Hing, Keith Tolson (Geosyntec), (front row) Mary DeFlaun, Richard Lanyon, P.E., BCEE (Metropolitan Water Reclamation District of Greater Chicago), and Engineer-in-Charge Chriso Petropoulou, Ph.D., P.E., BCEE.

**8** President Lue-Hing presents AAEE Treasurer Howard LaFever with the Honor-Small Projects Award for GHD's project, Downtown Scottsdale Booster Station, (Scottsdale, Arizona).





## THE 40th ANNUAL AAEE AWARDS BANQUET



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- *Honor Award:* CDM for Haworth WTP Upgrade Design-Build Project (Haworth, New Jersey). Peter Tunnicliffe, P.E., DBIA, BCEE, was the Engineer in Charge.
- *Honor Award:* CH2M Hill for Pine Creek Wastewater Treatment Plant (Calgary, Canada). J. Warren Switzer, PEng., was the Engineer in Charge.
- *Honor Award:* Owen Psomas for Hangtown Creek Water Reclamation Facility - 2005 Facility Improvements (Placerville, California). Webster J. Owen, Jr., P.E., was Engineer in Charge.

Environmental Sustainability, the competition's newest category, had a total of four winners. Awards were presented to:

- *Grand Prize:* ENTRIX, Inc. for Marco Island Aquifer Storage and Recovery System (East Naples, Florida). Lloyd E. Horvath, P.E., was the Engineer in Charge.
- *Honor Award:* Metropolitan Water District of Southern California for the Inland Feeder Program (Los Angeles, California). John V. Bednarski, P.E. was Engineer in Charge.

1 CDM and Aerojet's Patented Gaseous Electron Donor Injection Technology (GEDIT) for InSitu Biodegradation of Perchlorate and Nitrate (Rancho Cordova, California,) won for Superior Achievement. Pictured (left to right) are AAEE Past President Stephen R. Kellog, P.E., BCEE, (CDM), Rodney Fricke (Aerojet), Engineer-in-Charge Patrick Evans, Ph.D. (CDM), Andrea Leeson (Department of Defense Environmental Security Technology Certification Program), and William S. Howard, P.E., BCEE (CDM).

2 AAEE Treasurer Howard LaFever presented the 2010 Honorary Member Award to George R. Crombie.

3 2010 Edward J. Cleary Award winner Stephen R. Maguin, P.E., BCEE also served as Engineer-in-Charge for the Honor-Operations/Management winning IERCA - A Regional, Cost-Effective Approach to Sustainable Organics Management. Richard Atwater, also of the Sanitation Districts of Los Angeles County, accepted the award on his behalf.

4 AAEE Vice President Michael W. Selna, P.E., BCEE was presented with the 2010 Stanley E. Kappe Award from President-Elect Brian P. Flynn, P.E., BCEE.





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- *Honor Award:* PBS&J for Rothenbach Park Landfill Site Reutilization (Sarasota, Florida). R. Michael Peel, P.E., was the Engineer in Charge.
- *Honor Award:* Stearns & Wheler GHD for Cornell University Renewable Bioenergy Initiative (Ithaca, New York). Wayne E. McFarland, P.E., BCEE, was Engineer in Charge.

Operations/Management produced two winners.

Awards were presented to:

- *Grand Prize:* District of Columbia Water and Sewer Authority for Blue Plains AWWTP Nitrogen Removal Program (Washington, DC). Walter Bailey, P.E., BCEE was Engineer in Charge.
- *Honor Award:* Sanitation Districts of Los Angeles County for IERCA - A Regional, Cost-Effective Approach to Sustainable Organics Management (Los Angeles, California). Stephen R. Maguin, P.E., BCEE, was Engineer in Charge.

5 Dr. Lue-Hing presents Rao Y. Surampalli, Ph.D., P.E., BCEE, FAAAS, DIST.M.ASCE, with the 2010 Gordon Maskew Fair Award.

6 (left to right) President Cecil-Lue-Hing, D.Sc., P.E., DEE, Hon.M.ASCE., NAE, Major General Jeffrey W. Talley, Ph.D., P.E., and Executive Director Joseph S. Cavarretta, CAE.

7 Keynote Speaker Major General Jeffrey Talley, Ph.D., P.E., former Associate Professor of Environmental Engineering at Notre Dame University and now Chair and Professor, Department of Environmental & Civil Engineering Southern Methodist University, Bobby B. Lyle Professor of Leadership and Global Entrepreneurship, Founding Director, Hunter and Stephanie Hunt Institute for Engineering and Humanity.

8 AAEE President Cecil Lue-Hing, D.SC., P.E., DEE., Hon.M.ASCE, NAE stands at the podium.



## THE 40th ANNUAL AAEE AWARDS BANQUET

Planning boasted two winners. Awards were presented to:

- **Grand Prize:** Greeley and Hansen, LLC, for Regional Optimization Master Plan (ROMP) (Pima County, Arizona). Jerry C. Bish, P.E., BCEE, was Engineer in Charge.
- **Honor Award:** Jordan, Jones & Goulding, Inc., for US 411 Connector Environmental Impact Statement and Supporting Engineering (Bartow County, Georgia). Ken Anderson, P.E., was Engineer in Charge.

Research produced two winners. Awards were presented to:

- **Grand Prize:** District of Columbia Water and Sewer Authority and AECOM Technology Corporation for The Chesapeake Bay National Initiative Inspires the Development of a Sustainable Wastewater Purification Technology (Washington, DC). Walter Bailey, P.E., BCEE was Engineer in Charge.
- **Honor Award:** Geosyntec Consultants for Microbial Risk Assessment for Recreational Use of the Chicago Area Waterways (Chicago, Illinois). Chriso Petropoulou, Ph.D., P.E., BCEE, was Engineer in Charge.

Small Projects saw two winners. Awards were presented to:

- **Grand Prize:** Malcolm Pirnie, Inc., for Colorado Radionuclide Abatement and Disposal Strategy (CO-RADS) (Denver, Colorado). Jason M. Kerstiens, P.E., was Engineer in Charge.
- **Honor Award:** GHD, Inc. for Downtown Scottsdale Booster Station (Scottsdale, Arizona). Peter Chan, P.E., was Engineer in Charge.

The University Research award was presented to:

- **Grand Prize:** Institut National de la Recherche Scientifique, Centre Eau, Terre & Environnement (INRS-ETE) for Value-Added Products Through Bioconversion of Wastewater and Wastewater Sludge (Quebec, Canada). Dr. R.D. Tyagi and Dr. Rao Y. Surampalli, P.E., BCEE, both served as Engineers in Charge.

The *Superior Achievement Award*, given to the highest-scoring project, went to CDM for their project, Patented Gaseous Electron Donor Injection Technology (GEDIT) for InSitu Biodegradation of Perchlorate and Nitrate (Rancho Cordova, California). Dr. Patrick J. Evans was Engineer in Charge.

This year, for the first time, AAEE presented a technical conference in which five outstanding projects were to be presented followed by Q&A. Presentations were as follows:

- *Patented Gaseous Electron Donor Injection Technology (GEDIT) for InSitu Biodegradation of Perchlorate and Nitrate*, Patrick J. Evans, Ph.D., CDM
- *Marco Island Aquifer Storage and Recovery System*, Lloyd E. Horvath, PE., ENTRIX, Inc.
- *San Juan-Chama Drinking Water Treatment Plant*, Laurens Van der Tak, P.E., Vice President, Principal Technologist, CH2M Hill



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- *Richmond's Rapid Sewer Flood Relief*, Federico Maisch, P.E., BCEE, and Jessica Keeler, Greeley and Hansen
- *Blue Plains AWWTP Nitrogen Removal Program*, Walter Bailey, P.E., BCEE, District of Columbia Water and Sewer Authority

Full profiles of all winners and award recipients were presented in the Spring 2010 (V45, N2) issue of *Environmental Engineer* and can also be found on AAEE's website at <http://www.aaee.net>.

Thank you to Sammi Olmo and Richard Pope, P.E., BCEE, for providing the photos for this feature. **EE**

1 There were a total of 19 award winning projects for the 2010 Excellence in Environmental Engineering Competition.

2 President Lue-Hing stands at the podium flanked by Master of Ceremonies Stephen Maguin and VP Michael Selna.

A close-up photograph of a person's hands, wearing a dark suit jacket and a white shirt, writing on a document with a silver pen. The document appears to be a financial statement or ledger, with columns of numbers and text. The background is a soft, out-of-focus blue. The year '2009' is overlaid in large, white, semi-transparent numbers at the top.

# 2009

## Financial *Statements*



## Independent Auditors' Report

We have audited the accompanying statement of financial position of American Academy of Environmental Engineers, Inc. (a nonprofit organization) as of December 31, 2009, and the related statements of activities and changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the Academy's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Academy of Environmental Engineers, Inc. as of December 31, 2009 and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

ASKEY, ASKEY & ASSOCIATES,  
CPA, LLC  
Leonardtown, Maryland  
April 9, 2010

**NOTE:** *The accompanying notes are an integral part of these financial statements.*

## Notes to Financial Statements

December 31, 2009

### **Note 1 – Summary of Significant Accounting Policies**

#### **Nature and Organization**

American Academy of Environmental Engineers, Inc. (the Academy) was founded in 1955 to improve the practice of environmental engineering by certifying properly-qualified environmental engineering specialists, accrediting university environmental engineering curricula and by informing the public and environmental engineers through lectures, publications and other venues regarding proper environmental practices.

#### **Basis of Accounting**

The financial statements of the Academy have been prepared in accordance with accounting principles generally accepted in the United States of America on the accrual basis of accounting. Accordingly, revenue is recognized when earned and expenses are recognized when incurred.

#### **Basis of Presentation**

Financial statement presentation follows the requirements of the Financial Accounting Standards Board in its Statement of Financial Accounting Standards (SFAS) No. 117, Financial Statements for Not-for-Profit Organizations. Under SFAS No. 117, the Academy is required to report information regarding its financial position and activities according to three classes of net assets (unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets) based on the existence or absence of donor-imposed restrictions.

#### **Revenue Recognition**

Certification fees and certain other revenues are recorded as deferred revenue upon receipt and are recognized as revenue in the period to which the fees relate.

Contributions received are recorded as unrestricted, temporarily restricted, or

permanently restricted support, depending on the existence and/or nature of any donor-imposed restriction. Support that is restricted by the donor is reported as an increase in unrestricted net assets if the restriction expires in the reporting period in which the support is recognized. All other donor-restricted support is reported as an increase in temporarily or permanently restricted net assets, depending on the nature of the restriction. When a restriction expires (that is, when a stipulated time restriction ends or a purpose restriction is accomplished), temporarily restricted net assets are reclassified as unrestricted net assets and reported in the statement of activities as net assets released from restrictions. Unexpended grant awards are classified as refundable advances until expended for the purpose of grants since they are considered conditional promises to give.

#### **Cash and Cash Equivalents**

For purposes of the statement of cash flows, cash and cash equivalents consist of interest bearing and non-interest bearing demand deposits.

#### **Accounts Receivable**

Accounts receivable consist of amounts due for certification fees and reimbursements at the end of the year. Management considers all accounts receivable to be fully collectible; accordingly, an allowance for doubtful accounts has not been established.

#### **Pledges Receivable**

Pledges receivable consist of pledges to give funds to the Academy in future periods. Revenue is recognized for pledges when the donor makes a pledge to give to the Academy that is, in substance, unconditional. Management considers all pledges receivable to be fully collectible; accordingly, an allowance for doubtful pledges has not been established. In addition, substantially all pledges receivable are due within one year; accordingly, no discount on pledges receivable has been recorded in the accompanying financial statements.



### Property and Equipment

Property and equipment acquisitions in excess of \$500 are capitalized and recorded at cost as of the date of acquisition or fair value as of the date of contribution. Depreciation is calculated using the straight-line method based on the estimated useful lives of the assets. See also Note 3.

### Use of Estimates

The preparation of financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

### Fair Value of Financial Instruments

Unless otherwise indicated, the fair value of all reported assets and liabilities which represent financial instruments (none of which are held for trading purposes) approximate the carrying values of such amounts.

### Program Service Expenses

Program service expenses represent the direct cost of performing programs. Direct costs do not include salaries and related expenses. Management and general costs have not been allocated to such programs.

### Income Taxes

The Academy is exempt under Section 501(c)(6) of the Internal Revenue Code from paying federal income tax on any income except unrelated business income. No provision has been made for income taxes as the Academy has no net unrelated business income.

### Note 2 – Concentration of Credit Risk

The Academy maintains its cash reserves in a money market account that is not federally insured. Uninsured amounts in this fund totaled approximately \$44,500 at December 31, 2009.

### Note 3 – Property and Equipment

Property and equipment consists of the following at December 31, 2009:

### Estimated Lives (in years)

Furniture and			
Equipment	3-7	\$	33,141
Leasehold			
Improvements	10		<u>6,951</u>
		\$	40,092

### Less accumulated depreciation

(34,554)  
\$ 5,538

Depreciation expense for the year ended December 31, 2009 was \$2,068.

### Note 4 – Trademarks

Trademark costs incurred by the Academy are amortized over fifteen years. Trademarks and related accumulated amortization at December 31, 2009 totaled \$24,760 and \$16,676, respectively. Amortization expense for the year ended December 31, 2009 was \$1,505.

### Note 5 – Commitments

The Academy leases office space under a noncancellable operating lease which expires on August 13, 2013. Currently monthly payments are approximately \$3,100 and the lease includes a 3% annual escalation clause. Rent expense under this operating lease was \$37,154 for the year ended December 31, 2009 and is included in office expense in the statement of activities. Future minimum lease payments required under the lease for the years ending December 31 are as follows:

2010	\$	37,637
2011		38,766
2012		39,929
2013		<u>23,695</u>
	\$	<u>140,027</u>

The AAEE leases a copy machine under a non-cancellable operating lease that expires August 1, 2014. Monthly payments are \$438. Rent expense under this operating lease was \$1,751 for the year ended December 31, 2009 and is included in office expense in the statement of activities. Future minimum lease payments required under the lease for the years ending December 31 are:

2010	\$	5,253
2011		5,253
2012		5,253
2013		5,253
2014		<u>3,502</u>
	\$	<u>24,514</u>

In March 2009, the Academy entered into an agreement to use a web-based membership management service to track and manage its membership data. This two year agreement expires February 2011 and calls for monthly subscription fees of \$525. Future minimum subscription payments required under the agreement for the years ending December 31 are as follows:

2010	\$	6,300
2011		<u>1,575</u>
	\$	<u>7,875</u>

### Note 6 – Related Party Transactions

The Environmental Engineering Foundation, Inc. (the Foundation) was formed to support the operations of the Academy. The Academy manages the finances of the Foundation, including the collection of donations made to the Foundation. Periodically, funds collected on behalf of the Foundation are transferred from the Academy to the Foundation. At December 31, 2009 the balance of funds held on behalf of the Environmental Engineering Foundation, Inc. was \$889.

During 2009 the AAEE paid a firm owned by the wife of a former Executive Director \$8,100 for services rendered in connection with the search and hiring of the current executive director.

### Note 7 – Employee Benefit Plan

The Academy established a 401(k) Retirement Plan in 1997 for all employees meeting certain eligibility requirements. Employees may contribute up to 15% of their eligible compensation to the plan, subject to the limits of Section 401(k) of the Internal Revenue Code. The Academy does not match employee contributions.

**Note 8 – Unrestricted Net Assets  
– Board Designated**

It is the policy of the Board of Trustees to the Academy to review its plants for future projects from time to time and to designate appropriate sums to assure adequate financing of such projects.

Kappe Fund — represents a \$10,000 bequest received for the State of Stanley E. Kappe during 1985. The unrestricted bequest is used for the purpose of recognizing the contributions of Stanley E. Kappe to the environmental engineering profession. The Board has designated the fund as a Quasi-Endowment. Hence, the principal portion of this fund is to remain intact and the interest can be spent on funding the Kappe Lecture Series. The Board has also designated additional funds and any annual contributions to the Kappe Lecture to be used to fund the Kappe Lecture Series. Total designated funds as of December 31, 2009 amounted to \$16,709. The Academy cashed in the certificate of deposit for operating purposes during the year ended December 31, 2001 and intends to reestablish the certificate of deposit when funds are available.

**Note 9 – Prior Year Restatement**

The financial statements for the year ending December 31, 2008 have been restated to correct an error in deferred revenue. Deferred revenue at December 31, 2008 was understated and did not include all of the 2009 certification fees collected by the Academy during 2008. As a result, net assets and certification fees revenue were both overstated by \$14,170. The restatement is summarized as follows for the year ending December 31, 2008. **(Please see tables at the top of the next column.)**

**Note 10 – Subsequent Events**

Management has considered and evaluated subsequent events through April 9, 2010, the date the financial statements were available to be issued.

**Note 11 – Going Concern**

These statements are presented on the basis that the Academy is a going

	As Previously Reported <u>12/31/2008</u>	Prior Period Adjustment	As Restated <u>12/31/2008</u>
Deferred Revenue	\$198,610	\$14,170	\$212,780

	As Previously Reported <u>12/31/2008</u>	Prior Period Adjustment	As Restated <u>12/31/2008</u>
Unrestricted Net Assets (Deficit)	\$(29,903)	\$(14,170)	\$(44,073)

## Statements of Financial Position

December 31, 2009

### ASSETS

	2009
<b>CURRENT ASSETS</b>	
Cash and cash equivalents	\$ 113,409
Accounts receivable	7,421
Pledges receivable	5,900
Prepaid expenses	53,694
<b>Total current assets</b>	<b>180,424</b>
<b>PROPERTY AND EQUIPMENT</b>	
<b>Net</b>	<b>5,538</b>
<b>OTHER ASSETS</b>	
Trademarks, Net	8,084
<b>Total Assets</b>	<b>\$ 194,046</b>

### LIABILITIES AND NET ASSETS

<b>CURRENT LIABILITIES</b>	
Accounts payable and accrued expenses	\$ 10,839
Due to Foundation	889
Deferred revenue	288,105
<b>Total current liabilities</b>	<b>239,833</b>
<b>NET ASSETS</b>	
Unrestricted	(62,496)
Unrestricted — board designated	16,709
<b>Total net assets</b>	<b>(45,787)</b>
<b>Total liabilities and net assets</b>	<b>\$ 194,046</b>

concern. Going concern contemplates the realization of assets and the satisfaction of liabilities in the normal course of business over a reasonable length of time. The accompanying financial statements show a current year deficit in unrestricted net assets of \$45,787.

The AAEE has developed a plan to reduce expenses and increase revenues and continues to implement this plan. Management has project cash flows and prepared a balanced budget for 2010.

The AAEE continued existence depends on the success of cost reductions and developing of expanding its sources of revenue. EE

## Statements of Cash Flows

Years Ended December 31, 2009

### CASH FLOWS FROM OPERATING ACTIVITIES:

Change in net assets (1,714)

Adjustments to reconcile change in net assets to net cash provided (used) by operating activities:

Depreciation and amortization 3,573

(Increase) decrease in operating assets:

Accounts receivable 10,969

Prepaid receivable (1,820)

Prepaid expenses (10,583)

Increase (decrease) in operating liabilities:

Accounts payable and accrued expenses 3,344

Due to Foundation 889

Deferred revenue (15,325)

**Net cash provided by operating activities 19,983**

Cash and cash equivalents at the beginning of year (93,426)

Cash and cash equivalents at the end of year (113,409)

## Statements of Activities

Years Ended December 31, 2008 and 2007

2009

### SUPPORT AND REVENUE

Certification fees	\$ 360,965
Publications	63,707
Meetings	44,739
Contributions	41,562
Other income	12,195
Kappe lecture	6,800
Investment income	387

**Total support and revenue 530,355**

### EXPENSES

#### Program services:

Memberships	36,280
Environmental Engineer	27,912
Publications	19,303
Public education	17,004
Certificate/membership	15,305
Meetings and seminars	9,409
Kappe lecture	7,088
Committee expense	2,285

**Total program service expense 134,586**

#### Management and general expenses:

Staff salaries, fringe benefits and contract employment	270,585
Office expense	94,588
Legal, accounting and miscellaneous fees	12,446
Officer and trustee expenses	11,730
Insurance	3,656
Depreciation and amortization	3,573
Awards	205
Bad debt expense	700

**Total management and general expenses 397,483**

**Total expenses 532,069**

**Change in net assets 1,714**

**NET ASSETS AT BEGINNING OF YEAR (44,073)**

**NET ASSETS AT END OF YEAR \$(45,787)**

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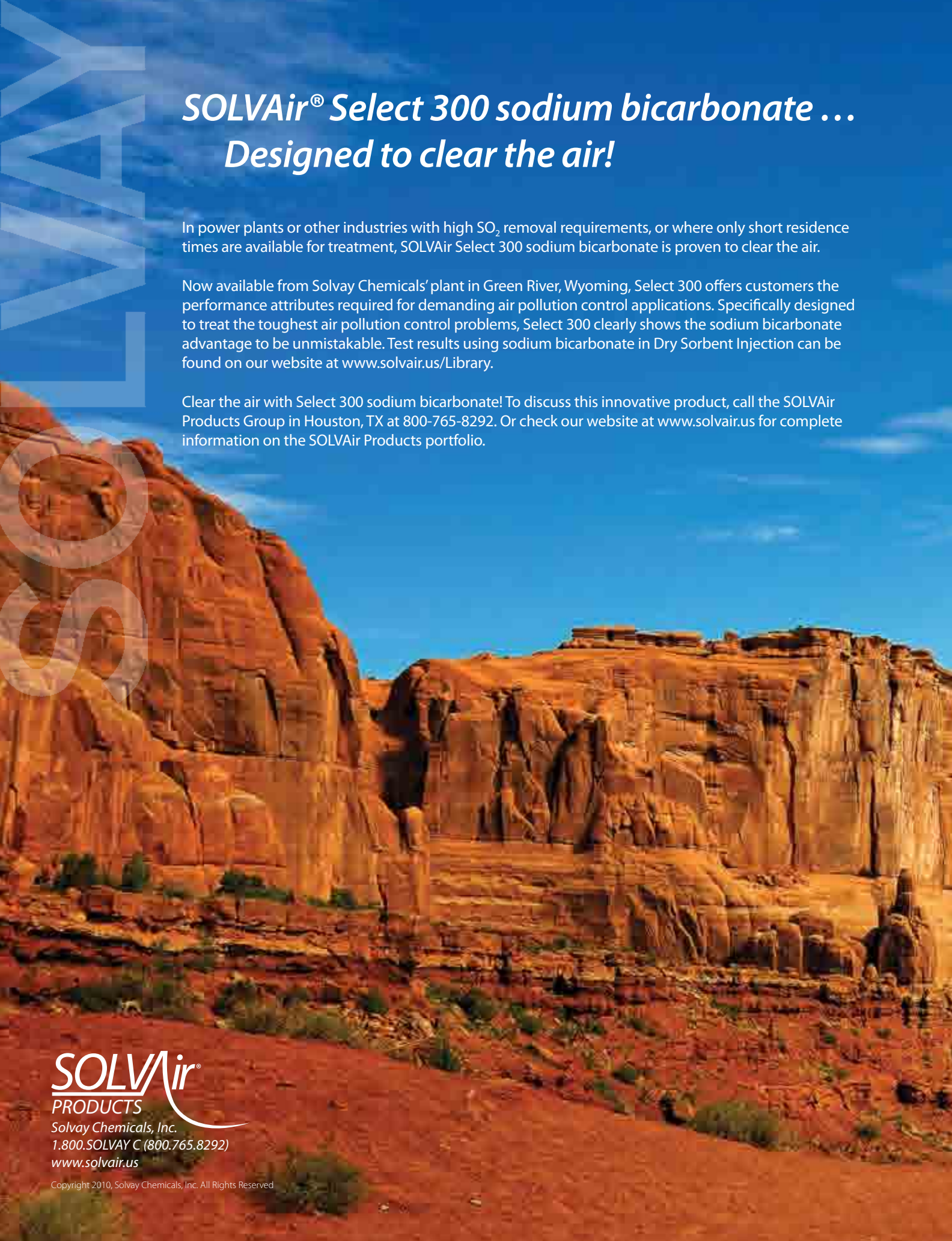
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### CONFERENCE PURPOSE & WHO SHOULD ATTEND

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Conference participants will also have the opportunity to learn about both large-scale and small local ecosystem restoration efforts and what their colleagues working at these levels have learned, what factors contributed to success, and how barriers and obstacles were overcome.

### WHY YOU SHOULD ATTEND

NCER '11 will help you expand your knowledge, share your experience and network with colleagues from across various disciplines such as engineering, science, economics and the social sciences. This is an excellent opportunity to increase your "toolbox" with cutting edge science, modeling and data management tools. Join us and participate in the ecosystem restoration discussion on:

- Effective partnering to integrate planning, policy, science and engineering to provide effective, relevant and timely solutions
- Combining state-of-the-art approaches, technology, tools and information to solve problems and achieve environmental sustainability
- Ensuring the continuity and completion of large-scale, multiple year projects that involve multiple government agencies, non-government organizations, tribal governments and other partners
- Setting goals and objectives
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