

NSPE LQPC White Paper – Certification of Environmental Scientists

Adopted by the NSPE Licensure and Qualifications for Practice Committee, June 15, 2011

The American Academy of Environmental Engineers (AAEE) certifies as Board Certified Environmental Engineers those licensed professional engineers who have met educational, experience, and continuing professional development prerequisites, and who have passed a written or oral examination in various sub-disciplines of environmental engineering. AAEE recently announced that it is also considering certifying scientists such as geologists and chemists who function as team members on environmental engineering projects.

The NSPE Licensure and Qualifications for Practice Committee has significant reservations regarding this proposal, as outlined below.

1. Delineation of Professional Practice – NSPE’s professional policies and position statements oppose certifications that could be used to permit unlicensed individuals to perform professional engineering services and/or require professional engineers to obtain such certifications in order to practice what has traditionally been within the practice of engineering. In many of the 29 states that currently license Professional Geologists, this has been a difficult and contentious issue, requiring careful negotiation of clear language which allows professional engineers to practice geology when they are competent to do so, while assuring that geologists do not practice engineering. In some states that have not enacted a statute to license Professional Geologists, the lack of ability to resolve this issue between engineers and geologists has been a stumbling block. Some states have been able to resolve these issues, but such resolutions have typically taken significant effort and compromise. Having scientists certified by the same entity that certifies engineers would necessitate resolving the delineation of the professional practice of engineering and applied science.
2. Confusion of the Public – Certifying geologists and chemists under the auspices of the American Academy of Environmental **Engineers** would be confusing to the public, including owners, managers, administrators and regulators. A name change, perhaps to the American Academy of Environmental Professionals, could be less confusing, but might also beg the question as to whether that should be the appropriate entity to certify environmental engineers. Perhaps a name change to the American Academy of Environmental Engineers and Scientists would be necessary.
3. Licensure – NSPE advocates by its Position Statement 1737 that specialty certification in the engineering field should be post-licensure. The current BCEEM certification of a few individuals by AAEE is contrary to NSPE’s position. The certification of geologists could be required to be only of those who are licensed as Professional Geologists. We are not aware of licensure programs for chemists. The certification of unlicensed individuals by the American Academy of Environmental Engineers would be misleading to the public, as it

would attest to the qualifications of individuals who are not allowed by law to practice engineering or geology in any jurisdiction requiring licensure.

4. Equivalence of Professional Qualifications – Engineers are licensed by State Boards of Licensure on the basis of the three-legged stool of ABET-accredited education or its equivalent, experience and examinations. The undergraduate and graduate education programs for both geologists and chemists in the US are not currently accredited in a similar, rigorous manner, although either or both could potentially be accredited by ABET under the Applied Science Accreditation Commission (ASAC). Absent accreditation, AAEE would have no reasonable means of confirming the quality of scientists' education. As a result, providing a certification similar to the engineering certification would be misleading to the public.

On the basis of the above, the NSPE Licensure and Qualifications for Practice Committee is opposed to the proposal by the American Academy of Environmental Engineers to certify environmental geologists and chemists.

The Committee recognizes the potential value to the public of a certification program which provides assurance of the education, experience, examination and continuing professional development of scientists who are integral members of environmental engineering teams. The NSPE L&QP Committee encourages AAEE and the scientists seeking certification to establish a rigorous certification program through one of the appropriate science organizations.

NSPE LICENSURE & QUALIFICATIONS FOR PRACTICE COMMITTEE MEMBERS (2010/2011):

(Present and voting, June 15, 2011)

Craig N. Musselman, P.E., F.NSPE, BCEE, Chair

J. Steven Almon, P.E., F.NSPE

Bernard R. Berson, P.E., L.S., F.NSPE

Howard N. Blitman, P.E., F.NSPE

Josephine L. Emerick, P.E., F.NSPE

Jeffrey H. Greenfield, PhD, P.E., F.NSPE, BCEE

Andrew S. Haimes, P.E., F.NSPE

Thomas "Dudley" Hixson, P.E., F.NSPE, BCEE

James D. Lesikar, II, Ph.D., P.E., F.NSPE

John F. Ourada, P.E., NSPE

Monte L. Phillips, Ph.D., P.E., F.NSPE

Paul D. Schmidt, P.E., F.NSPE

Edmund P. Segner Jr, Ph.D., P.E., NSPE

L. Robert "Larry" Smith, P.E., F.NSPE

Paul K. Taormina, P.E., NSPE

Kirankumar V. Topudurti, Ph.D., P.E., NSPE, BCEE

John J. Plaisance, P.E., L.S., F.NSPE (NSPE Board Liaison)

DRAFT