


TO: NSPE Board of Directors

cc: NSPE Committee, Task Force, Council and Interest Group Chairs
State Society Presidents and Presidents-elect
State Society Executives Council
NSPE Past Presidents

FROM: Mark J. Golden, FASAE, CAE 
Executive Director

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RE: Board Update: September 1-15, 2016

Championing the PE License

In another victory for licensed professional engineers and the public health, safety, and welfare, the Environmental Protection Agency listened to NSPE and included strong requirements for a PE in its [final rule](#) on emissions and compliance related to municipal solid waste landfills. In [comments](#) submitted in September 2015, NSPE stressed the importance of proposed new safety measures requiring a professional engineer to prepare site-specific gas collection and control system plans. In the final rule, the EPA mandates that all required state plans “include a process for state review and approval of the site-specific design plan for each gas collection and control system. The collection and control system design plan must be prepared and approved by a professional engineer.”

The rule also finalizes two criteria for when an affected source must update its design plan and submit it to the EPA administrator for approval. “A revised design plan must be submitted on the following timeline: (1) Within 90 days of expanding operations to an area not covered by the previously approved design plan; and (2) prior to installing or expanding the gas collection system in a manner other than the one described in the previous design plan. The final rule continues to require landfill owners or operators to prepare both an initial and revised design plan.”

The final rule becomes effective October 28, 2016.

Technological development and experimental deployment of autonomous vehicles continues at a rapid pace, as does the increasing debate over whether the public health, safety and welfare is being adequately considered. NSPE has argued that professional engineers need to be involved, so that the same competence and ethics that went into building out the physical transportation infrastructure is applied to AI-based transportation.

Michigan would no longer require an operator to be inside a self-driving car while testing it on public roads under legislation passed unanimously September 7th by the state Senate. Backers hailed the measures as necessary to keep the US auto industry's home state ahead of the curve on rapidly advancing technology. A week later, at an auto industry event in

Michigan, the great-grandson of Henry Ford called for a public debate to address the ethical issues emerging in a world where driverless cars will make life-and-death decisions in roadway crashes. When they do, Bill Ford, executive chairman of Ford Motor Company asked, “How do you want these vehicles to behave? Whose lives are they going to save?”

On September 14th, Uber began operating a fleet of four vehicles in Pittsburgh, marking the first availability of self-driving cars for use by the general public in the US. The Uber project has a company safety technician in the vehicle with the passenger and early reports indicated that, at least under ideal driving conditions, the vehicles were performing well. However, according to reports, the Uber technician needed to intervene and take control of the vehicle frequently. The Washington Post reports that Pittsburgh locals’ reactions to the Uber test “run the gamut ... from hopeful to ... a reluctance to trust,” while former head of the National Highway Traffic Safety Administration, Joan Claybrook, complained that the test is getting “miles ahead of the state of regulation” and accused the company of “essentially making the commuters the guinea pigs,” when Uber “can do the exact same tests without having average citizens in your car.”

NSPE continues to press for professional engineers to be involved in independent testing of autonomous vehicles to ensure that technological innovation is ethically pursued with public welfare kept foremost.

These efforts have been noticed, as witnessed by an invitation to NSPE from a Washington, DC policy think tank, Third Way, to participate in discussions into the feasibility of an advisory group to “fill in some of the grey areas and gaps” in the work already taking place within federal, state, and local governments, academia, and by private sector leaders and innovators on autonomous vehicles. We are cautiously exploring this opportunity: some major industry and public policy players are involved. But even if these discussions go nowhere, the fact that NSPE has established sufficient prominence and credibility that it is being sought out to speak for the PE on the PE’s role in ethical innovation by the Washington policy community is an impressive achievement.

Ethical Guide to the Profession

Noah Goodall, Ph.D., P.E., a research scientist with the Virginia Transportation Research Council, will deliver an [encore presentation](#) of his 2016 PECON session, *Ethics of Autonomous Vehicles*, on September 28. This presentation focuses on the role of ethics in automated driving and the potential for inequitable risk exposure.

The NSPE Professional Liability Committee is putting the finishing touches on the Insurance Carrier Interviews that will be conducted on September 29th in Chicago. Twelve carriers will be interviewed in order to update the annual survey to identify carriers that meet the professional liability and risk management needs of design professionals and to gain general information about insurance trends. (Last year’s survey can be viewed on the NSPE [website](#).)

Powering Professional Advancement

The cover story of the September/October edition of *PE* magazine took the vital issues discussed during the House of Delegates Caucus meeting in Dallas to the general membership. “[End of an Era?](#)” summarized the work the Future of the Profession Task Force will be pursuing this year to ensure that the engineering profession can adapt and change to meet the demands of the future.

Discussion on this issue quickly spilled over into NSPE’s online community, where members vigorously took up the topic and lively debate ensued.

Uniting the PE Community

In a special back-to-school episode of *NSPE Speaks* released September 12th, the podcast covers the Maker Movement on college campuses, NSPE student chapters, and how students and professors can make the most of their academic year. The episode also features an interview with NSPE's 2016 Young Engineer of the Year Jason Stith, P.E.

NSPE Speaks also posted a bonus episode featuring President Kodi Verhalen, P.E., Esq., F.NSPE in which she discusses the opportunities for leadership and engagement at all levels of NSPE and how those opportunities helped on her journey to becoming the youngest president in the Society's history. She also shares her thoughts on the specific challenges facing engineering in the future and what those may mean for NSPE, along with her hopes for what the Society can accomplish in the coming year.

These most recent, as well as earlier editions of the podcast can be found on NSPE [website](#) or on [iTunes](#).

In addition to the member open forum, NSPE has now launched 11 committees/taskforces and 3 interest groups forums on the NSPE Higher Logic online community platform. Moving forward with implementation, we have created pilot communities (linked to and powered from the relevant component’s membership records in the AMS database) for the Indiana Society of Professional Engineers, Kansas Tri-Valley Chapter; and Northern Virginia Virtual Chapter. Once these three launches have been tested and are going smoothly, we will begin to implement with other interested states and chapters on a first-come-first-served basis. Any interested state or chapter should contact [Kim Granados](#) to get on the list.

NSPE has purchased two logo-branded table covers, two step and repeats, and two table top displays for its own use at any exhibiting opportunity, but which we also will make available to state societies upon request for their own use at meetings. (A step and repeat banner (sometimes called press wall) is a publicity backdrop used for exhibits and in event photography, where its repeated pattern of logos can serve as backgrounds in photographs of the individuals standing in front of it. Those who attended Dallas or have viewed the PE Day photos we captured there will be familiar with these.)

The National Engineer Week Foundation's Future City program was featured in the TV show [FabLab](#) the weekend of September 3-4th. Aired nationally on Fox affiliates, the show featured participants from the 2016 White House Science Fair, including the Future City team from Nevada who appear approximately 12 minutes into the episode.

A planning [webinar](#) for the 2017 Engineers Week, offering information on the new resources and activities members and state societies can use to celebrate engineering and engage students along with tips and ideas from other volunteers, will be offered on September 28th. This year's EWeek theme and poster design will also be publicly launched on the webinar.

And remember, you always have access to NSPE leadership resources in the [Leadership Toolbox](#). This includes [talking point](#) scripts and presentations for use by NSPE officers, board members, and other leaders during state visits, chapter meetings, or other venues to promote NSPE and its activities, updated on an at least quarterly basis. Current board members can access an online library of board meeting materials (past, current and future) through the online board book site, ([BoardBookIt](#)).

If you want to review NSPE's history and how that has been translated into current plans with a future-focus, NSPE's purpose, mission, vision and a history of the *Race for Relevance* and the resulting Strategic Plan is summarized in a section called "[Who We Are and What We Do](#)."