Texas Board of Professional Engineers



Texas Board of Professional Engineers Professional Practice Update / Ethics

Rick Valdes Senior Investigator 2018

http://engineers.texas.gov/outreachsurvey

Agenda

About the Board
Core Functions

Licensing
Enforcement

Law and Rules
Board Activities



Website and Social Media

http://engineers.texas.gov

- Facebook: Texas Board of Professional Engineers
- Twitter: TBPE_Exec
- LinkedIn: Texas Board of Professional Engineers
- RSS Feed on our website: http://engineers.texas.gov
- YouTube: <u>https://www.youtube.com/</u> channel/UCm0YTnjR3StveBxWhCT4MiA
 YouTube



TEXAS BOARD OF PROFESSIONAL ENGINEERS

Nine Members - Appointed by Governor

- 6 Licensed Professional Engineers
- 3 Public Members
- Standard term is 6 years



TBPE

Daniel O. Wong, PhD, PE	Houston - Chairman
Sina K. Nejad, D.Eng, PE, PEng	Beaumont - Vice Chair
Kyle Womack, PE	Midland - Secretary
Edward Summers, PhD (public member)	Austin - Treasurer
Lamberto "Bobby" Balli, PE	San Antonio
Catherine Norwood, PE	Midland
Elvira Reyna (public member)	Denton County
Sockalingam "Sam" Kannappan, PE	Baytown
Albert Cheng (public member)	Houston



TBPE STAFF

31 Staff members, Austin <u>Lance Kinney, PhD, PE</u> - Executive Director <u>David Howell, PE</u> – Deputy Executive Director <u>Vacant</u> - Compliance & Enforcement <u>Rick Strong, PE</u> - Licensing Janet Sobieski - Operations



TBPE MISSION

Public Safety

Our mission is to protect the health, safety and welfare of the people of Texas by regulating and advancing the practice of engineering through licensure of qualified individuals, compliance with the laws and rules, and education about professional engineering.



History of TBPE

- Created by Texas Legislature (45R) in 1937
- New London School Explosion
 - 300 students and teachers killed
 - Result of improperly designed mechanical and electrical devices
- Established a Board to regulate the practice of engineering through licensing and rules of practice





BOARD PRIMARY FUNCTIONS

Since 1937 -

- License Qualified Engineers
- **Enforce** Engineering Practice Act
- Since 2003 Requiring Firm Registration
- Since 2005 Requiring Continuing Education

Now

– Educate – PEs, Officials, Potential PEs,
 Public



TBPE LICENSING HISTORY

867 individuals registered on 1st roster published 02/12/1938

Over 129,000 Texas licenses granted since then.

Currently over 64,000 licenses



PROFESSIONAL LICENSING

- Protection of the Public
- Ethical expectations
- Competence
 - Initial Qualifications
 - Education, Experience, Examinations
 - Staying Current
 - Continuing Education
- Professionalism



PROFESSIONAL LICENSING

System to Protect the Public:

- Sets the minimum standards for licensure as a Professional Engineer
- Sets continuing practice and competence standards
- Sets ethical and professional standards
- Compliance with these standards of professional practice
- Standards for indicating competence (titles, seals, etc.)
- Prevents unqualified individuals from offering or practicing where it could endanger the public



Public Perception of Engineers

Please tell me how you would rate the <u>honesty and ethical standards</u> of people in these different fields -- very high, high, average, low or very low? (Gallup 2016)

Profession	% Very High / High
Nurses	84%
Military Officers	71%
Pharmacists	67%
Engineers	65%
Medical Doctors	65%
Police Officers	58%















80 Years of Engineering a Better Texas

Licensing Competence

- Competence is gained by Education and Experience; Measured by FE and PE examinations
- Texas uses nationally accepted standards, but considers each application independently.
- Texas does not license by discipline, but Professional Engineers must not practice outside of their competence.
 - §137.59(a) Engineers shall practice only in their areas of competence.



Engineering Ethics

- Protection of Public Health, Safety, Welfare
- Ethical responsibilities and expectations
 - Avoid Conflicts of Interest
 - Be a Faithful Agent
 - Be prepared to have a dissenting opinion, if necessary
 - Obligation to be aware of violations of the Act.
- How does this protect the public?
 - We are expected to know the right thing to do and to do the right thing in the practice of engineering.



- Protection of Public Health, Safety, Welfare
- Communication
 - Honesty
 - Clarity (not misleading)
 - Respectful of all parties
 - Maintain Public Trust
 - Timely communication with the TBPE
- How does this protect the public?
 - We are expected to be complete and correct in the practice of engineering.



COMPLIANCE & ENFORCEMENT

Technical / Ethical / Professional

Approximately 600 Cases opened last year

- 64,970 licensed PEs (01/2018)
- About 65% resolved with Voluntary Compliance
- Board action includes range of action up to revocation
- Less than 10% Dismissed



A P.E. entered into a contract agreement with an apartment complex located in Texas to prepare an engineering foundation repair design.

The PE then entered into subcontract agreements with foundation repair firm to provide the foundation repair for the Project for a total cost of \$75,500.00.

The contracted Firm completed the repair work for the Project.



- Two months later, the PE had tendered only \$23,000.
- The Firm contacted the PE inquiring about the delinquent money owed.
- The PE informed the Firm he had not remitted the money owed because he had not been paid by the Client.



The Firm contacted the Client who informed the Firm the Client had in fact, paid the PE in full. The PE later admitted he had been paid by the Client and that he had comingled and misappropriated the funds for the Project

• This was a violation of:



- **A.** §137.57(b)(3) The issuance of oral or written assertions in the practice of engineering shall not be: misleading or shall not in any manner whatsoever tend to create a misleading impression.
- **B.** §137.63(a) Engineers shall engage in professional and business activities in an honest and ethical manner...
- C. §137.63(b)(5) The engineer must: conduct engineering and related business affairs in a manner that is respectful of the client, involved parties, and employees...
- D. All of the above.



Answer: All of these

- **§137.57(b)(3)** The issuance of oral or written assertions in the practice of engineering shall not be: misleading or shall not in any manner whatsoever tend to create a misleading impression.
- §137.63(a) Engineers shall engage in professional and business activities in an honest and ethical manner...
- §137.63(b)(5) The engineer must: conduct engineering and related business affairs in a manner that is respectful of the client, involved parties, and employees...



scenario - misleading

- A Texas P.E. accepted the assignment to inspect a foundation of a residence for a service charge of \$500.00.
- The PE performed the inspection and was paid in full the agreed upon price for the inspection.



scenario - misleading

- The PE told the client he would provide a written report of the inspection "the next day"
- The PE informed the client via text message the reported would be delayed.
- After several weeks and repeated attempts to obtain the report, it was not sent to the client.



scenario - misleading

True or False -

The PE violated § 137.57(b)(3) The issuance of oral or written assertions in the practice of engineering shall not be: misleading or shall not in any manner whatsoever tend to create a misleading impression.

True.



scenario - misleading

Board Actions may differ

Factors considered in each case review:

- 1) the seriousness of the violation, including the nature, circumstances, extent, and gravity of the prohibited act and the hazard or potential hazard created to the health, safety, or economic welfare of the public;
- 2) the history of prior violations of the respondent;
- 3) the severity of penalty necessary to deter future violations;



scenario - misleading

Factors considered in each case review:

- 4) efforts or resistance to efforts to correct the violations;
- 5) the economic harm to property or the environment caused by the violation; and
- 6) any other matters impacting justice and public welfare, including any economic benefit gained through the violations.



Enforcement - Filing A Complaint

- Mail, email, phone, facsimile all are acceptable for initial contact
 - Anonymous complaints are accepted
- A complaint form or detailed letter/email is needed to cover all the bases
 - Forms can be found Online
- Provide specific instances of violation
- Provide evidence to show probable cause



Board Actions

- Reprimands (Formal and Informal)
- Suspension (possible probation)
- Refuse to Renew
- Revocation
- \$5,000 per violation per day
- Cease and Desist Orders
- Emergency Suspension



Additional Enforcement Options

- Ethics Courses
 - National Institute for Engineering Ethics (Texas Tech)
- Technical Courses
- Restitution
- Practice limitations
- Civil or Criminal cases
 - Assisting Jurisdictional Authorities



Enforcement

By law, all violations, except informal reprimands, must be published

- On TBPE website by Board Meeting Date
- Added to NCEES Enforcement Exchange (national database)
- Published in the newsletter which is mailed at least annually and quarterly E-newsletter emails



Preventing Complaints

- CLEAR:
 - Communication (between all parties)
 - Contract (expectations and responsibilities)
 - Calculations and designs (be prepared to support)
- Keep your Documentation

Most importantly – know the law, and contact us if you have a question!



Notifications

Which of the following are you required to report to the Board?

- A. Change of email address and home phone number
- B. Change of Employer
- C. Disciplinary Actions take in another state
- D. Civil lawsuits brought against you
- E. None of the Above.



Notifications

Reporting required -

- A. Change of email address and home phone number
- **B.** Change of Employer
- C. Disciplinary Actions take in another state
- D. Civil lawsuits brought against you



Notifications

Within 30 days, licensees, must notify the Board of changes to:

- Legal name change
- Mailing address
- Employer info / Employment Status
- Disciplinary Actions take in another state
- Criminal Convictions (Felony or Misdemeanor)



Educate

PEs, Officials, Potential PEs, Public

- What is a P.E.? / What do they do?
- Public Perception
- The Value of Licensure
- How does the TBPE fit in?



Educate

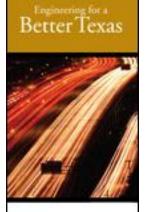
- Engagement
- Outreach

– Presentations, webinars, publications

- Advisory Groups
 - Working with customer groups directly
 - Government, Academia, Industry, Future
 Engineers



Outreach Publications









What is the Professional Services Procurement Act?





How to Become a Licensed Professional Engineer





What are the benefits of being a licensed Professional Engineer?







Working with Government

- Government Advisory Group
 - State agencies, Cities, Counties, School Districts
- TBPE Outreach
 - Building Officials
 - Texas Municipal League, etc.
- What we can do for them
 - When PE is required on projects / public works
 - Better understanding of State Laws
 - The role of a Professional Engineer



Which of the following would constitute satisfactory continuing education allowed by Texas rules?

- A. 15 hours for a patent submitted to the US Patent and Trademark Office.
- B. 7 hours for teaching the same one hour course to students at different schools.
- C. 6 hours for active participation in a local engineering association.
- D. Carry forward 15 hours from the previous year.
- E. None of the above



Answer E

- A. 15 hours would be allowed if a patent was **issued**, but not submitted (137.17 (h)(9))
- B. A PE can only take credit for the first time a class is taught (137.17 (i)(8)). But 3 PDH may be claimed for active participation in educational outreach.
- C. A maximum of 5 hours **per professional organization** may be claimed (137.17 (h)(7))
- D. A maximum of **14 unused hours** may be carried forward, but Ethics must be performed annually (137.17 (d))



- 15 hours
 - Must include 1 hour of Ethics
 - May include up to 5 hours of self-study
 - May include up to 3 hours of **Educational Outreach**
- Random audits ongoing
- Keep documentation for 3 years
- Fines as high as \$5,000; separate violations for claiming Continuing Ed without documentation or not responding to Board.





TEXAS BOARD of PROFESSIONAL ENGINEERS Engineering For A Better Texas
 1917 S Interstate 35
 512-440-7723

 Austin, Texas 78741-3702
 http://engineers.texas.gov

January 12, 2018

David Lawrence Howell, P.E. 14100 Thermal Drive #1704 Austin, TX 78728

RE: Continuing Education Audit for License #83290

Dear Professional Engineer:

Compliance with our continuing education requirement is **mandatory** for renewal of an Active license. Each renewal period we randomly select licensees so that we may audit their compliance with our continuing education requirements (see Board Rule 137.17 at our website <u>http://engineers.ccsa.gov</u>). By Board nile, licensed engineers are required to obtain at least 15 hours of continuing education (1 hour of which must be ethics) during each renewal year. The educational activities should be relevant to your engineering career and may include safery, management and software training. You have been selected to participate in this process of verification for the current license renewal period covering **January 1**, **2017 through December 31**, **2017**.

Please forward to the Texas Board of Professional Engineers by February 12, 2018, COPIES of relevant documentation of your continuing education participation you obtained within the audit period of January 1, 2017 through Decomber 31, 2017. These copies will remain in our office and will not be returned to you. Please note that the best response to this audit would be copies of completion certificates or certificates of attendance to continuing education activities. If you don't have certificates for the claimed activities, then include receipts, agendas, conference flyers or other documentation that shows you actually attended the claimed activity. You may also include a log sheet summarizing your continuing education with the documentation. Please note that the log sheet alone is not a sufficient audit response. Also note that just joining a technical society is not enough to claim continuing education credit. You must be an officer or participate in a committee to claim credit.

It is preferred that you scan your information and e-mail a response to <u>cepaudits@engineers.texas.gov</u>. If you scan your documentation, please, if possible, attach all of the documents in one file (limit & Mb). Do not send copies of material read for self-study; the title page and table of contents is sufficient. **You are limited to only 5 hours of self-study credit**.

If you received this audit notice, our records indicate that you were required to obtain at least 15 hours of continuing education during the renewal period and are expected to respond to this audit. If you were unable to obtain continuing education due to a medical condition or were deployed by the military for a period of time exceeding 120 days in the last year, you may be eligible for an exemption. If you claumed that you were exempt from Continuing Bducation for this period, please forward copies of all relevant documentation that you believe will support your exemption claim. **Please note you must respond to this audit even if you are over 65**. Please note that failure to respond may subject you to disciplinary action.

You should receive a letter in the mail confirming completion of the audit within 2 weeks of submittal. I will contact you if I need more documentation or have questions. Please do not include requests for additional information or other questions in your audit submittal. I thank you, in advance, for your assistance and prompt attention to this request. Please contact me if you have any questions or concerns regarding this matter.

Sincerely,

Debbie Trevino CE Coordinator



Exemptions - <u>must be claimed when you renew</u>

- 1st renewal after passing the PE exam for licensure
- Active duty military deployment
- Disability
- Inactive status
- Being over 65 is not an exemption for Continuing Ed



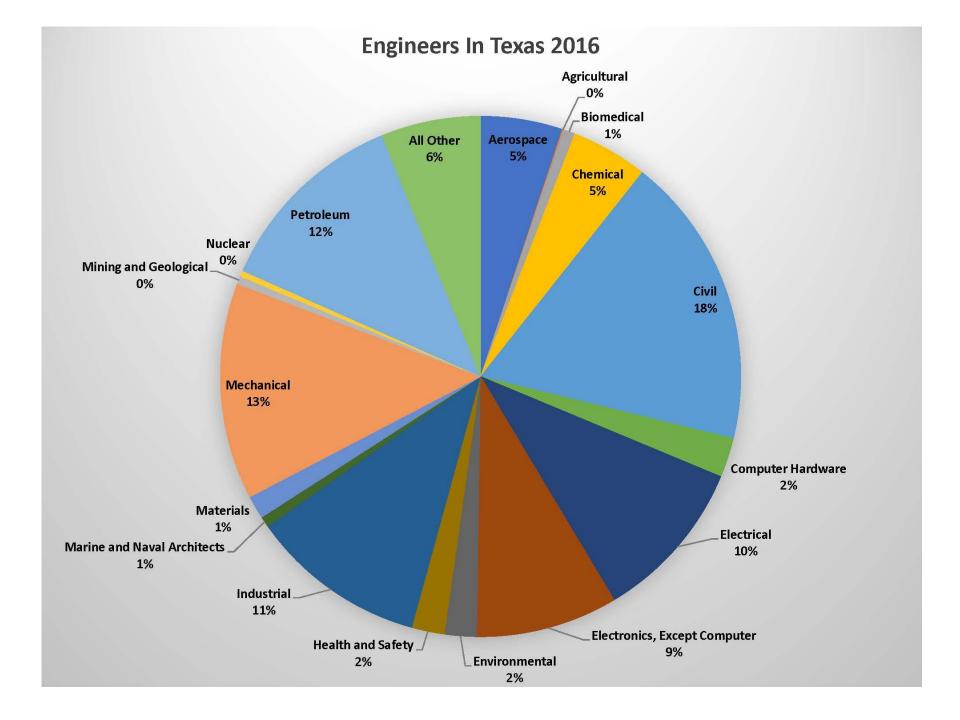
Licensing Did you know???

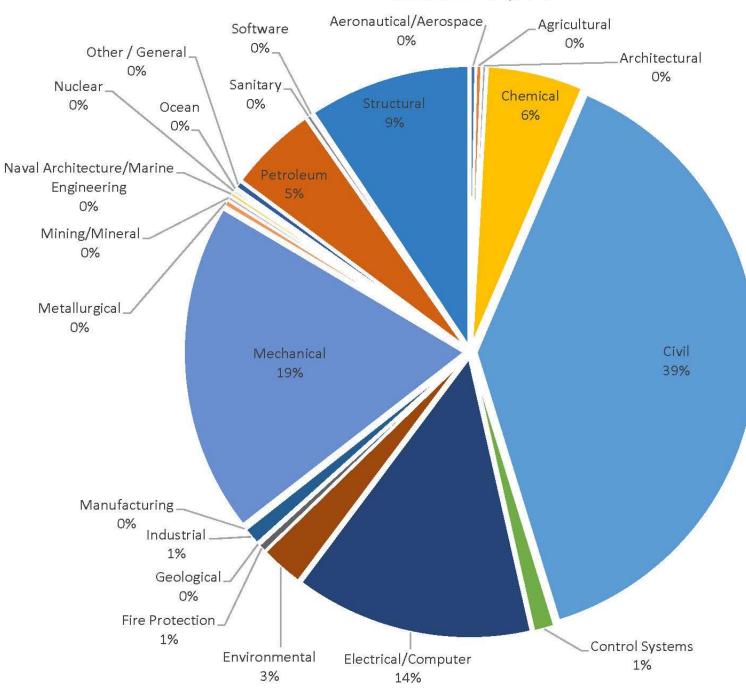
• Only about 20% of US engineers are licensed.

Bureau of Labor Statistics (2016)

- 146,400 engineers in Texas
 - Civil 26,500
 - Petroleum 18,000
 - Industrial 16,000







TEXAS PEs - 64,970

Representation Scenario

Which of these unlicensed individuals are lawfully able to identifying themselves as an "Engineer" on business cards, letters or email communications?



Representation Scenario

- A. Bill has an ABET accredited engineering degree and works for a City in the Public Works Department.
- B. Sam performs engineering equipment design for Quality Pumps, a company that manufactures and sells pumps and equipment.
- C. John has an ABET accredited engineering degree, works for a registered engineering firm and is supervised by a professional engineer.
- D. Katy has an engineering degree and is a sales representative providing recommendations for High Power Lighting, a commercial private company.
- E. None of the above.



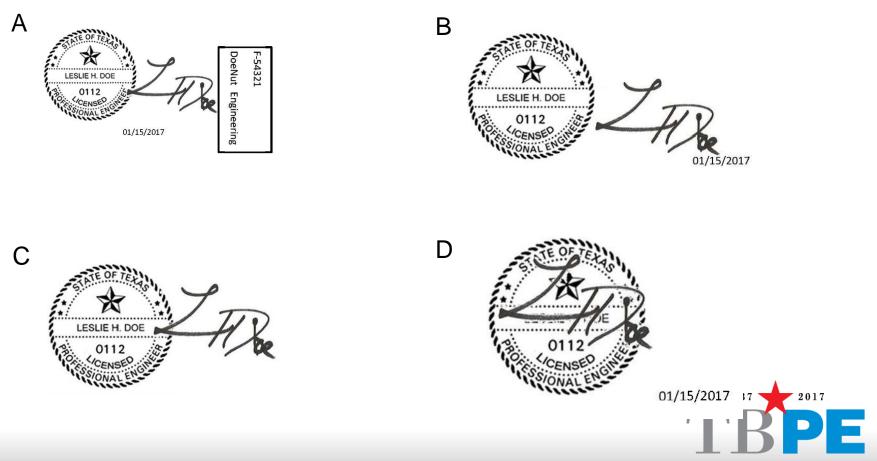
Representation Scenario

- A. Bill can use the title "Graduate Engineer"
- B. Sam can use an internal title including the word "engineer" since she works under the industrial exemption.
- C. John can use the title "Engineer".
- D. Katy can use a title including the word "engineer" since she practices under the Utility employee exemption.

In all cases, the use of the title should not be used in a way that implies licensure or the ability or willingness to perform engineering services requiring a licensed professional engineer.



Seals Which of These is Correct?



80 Years of Engineering a Better Texas

Best answers?

- A or B
- 137.33(f) License holders shall affix their seal and original signature or electronic seal and signature with the date on the final version of their engineering work before such work is released from their control.
- (1) The signature and date shall not obscure the engineer's name or license number in the seal.
- Firm name and number are required on sealed documents, but do not have to be part of the seal itself.



Law and Rules

- Board is authorized by the Texas Engineering Practice Act
- Board interprets and implements the statute to create Rules
- Other statutes and rules also apply to engineering (PSPA, Windstorm, Architectural Barriers/ADA, etc.)
- Texas Professional Engineers are expected to know the Act, Board Rules, applicable state laws and local codes.



Engineering for a better Texas

Policy Advisory Opinions

- Provision Added to TEPA in 2003
- Allows Board to develop formal written interpretations of law and rules for specific or hypothetical 'Gray Areas'
- Over 30 interpretations for a variety of subjects

 <u>http://engineers.texas.gov/policy.htm</u>
- How to submit PAO Request / Forms at:
 - <u>http://engineers.texas.gov/Policy_Advisory.htm</u>



Legislative News and Rulemaking



Recent Rules – Hurricane Harvey

September 2017

- Emergency Temporary Licenses for licensed PEs from other states to help with recovery.
- Specific geographical area designated by Governor Abbott (specific counties)
- Limited timeframe (90 days)
- Emergency Board Meeting held September 5, 2017
- Similar rule was enacted after Ike and Katrina



Engagement - Webinars

- PE Ethics
 - March, June, September, December
 - Sign up online
- FE Exam / Why become a PE? (Students)
- How to Apply (EITs)



Outreach

Fiscal Year	Attendees	Presentations
2014	14,866	155
2015	19,751	150
2016	19,429	138
2017	23,004	150

- Quarterly Webinars
- Includes K-12 / E-Week



Thank You

1917 S Interstate 35, Austin, TX 78741 Phone: 512-440-3054 <u>Rick.valdes@engineers.texas.gov</u>



http://engineers.texas.gov/outreachsurvey

