Abstract: Updates on Board rule changes within the last year, general updates on initiatives the Board is working on, information on enforcement statistics, and the engineering Code of Conduct.

Title: "Texas Board of Professional Engineers – Professional Practice Update"

Speaker Bio:

Rick Valdes, Texas Board of Professional Engineers, Investigator IV is an Investigator IV with the Compliance & Enforcement Department, Texas Board of Professional Engineers. He has over 24 years of experience as an investigator with the State of Texas; eleven of those years with the Board. As an investigator, Rick ensures that the TPBE Act and Board Rules are followed and also investigates complaints that are received by the Board regarding violations to the Act and or Board Rules.

Rick has worked for the Travis County Sheriff's Department, and the Texas Department of Licensing and Regulation and while there, was the Program Manager of Professional Boxing for the State of Texas. Additionally, Rick was also the Supervising Investigator for the Texas Real Estate Commission before joining our team.

Rick has a Bachelor's Degree in Criminal Justice from Southwest Texas State University '86, San Marcos, Texas.

For additional information, please contact:

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Texas Board of Professional Engineers Professional Practice Update / Ethics

Rick Valdes
Senior Investigator
November 2016

http://engineers.texas.gov/outreachsurvey

Engineering for a better Texas



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: https://www.youtube.com/
 channel/UCm0YTnjR3StveBxWhCT4MiA





AGENDA

- About the Board
- Professionalism
- Outreach/Visibility
- Policy Advisory Opinions
- Legislative Update
- Decoupling
- Board Initiatives

Engineering for a better Texas



TBPE

Nine Members - Appointed by Governor

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



TBPE

Daniel O. Wong, PhD, PE

- Chairman - Houston

Lamberto "Bobby" Balli, PE

San Antonio – Vice Chair

Edward Summers, PhD (public member)

Austin – Treasurer

Sockalingham "Sam" Kannappan, PE

- Baytown - Secretary



TBPE

Cathy Norwood, P.E.

Midland

Elvira Reyna (public member)

Denton County

Sina K. Nejad, PhD, PE, PEng

- Beaumont

Kyle Womack, PE

Midland

Albert L. Cheng (public member)



TBPE STAFF

31 Staff members, Austin

Lance Kinney, PhD, PE - Executive Director

<u>David Howell, PE</u> – Deputy Executive Director

<u>Dave Daigle</u> - Compliance & Enforcement

Robert Opiela, PE - Licensing

Jeff Mutscher - Finance

Janet Sobieski - Information Technology



Professional Engineer

BOARD PRIMARY FUNCTIONS

- Licensing Qualified Engineers
- Enforcement of Engineering Practice
 Act
- Requiring Continuing Education
- Educate PEs, Officials, Potential PEs,
 Public



Professional Engineer

EXPECTATIONS

- Protection of the Public
- Ethical
- Competent
 - Initial Qualifications
 - Staying Current
- Professionalism



Professionalism

More than just Codes and Rules

"Meticulous adherence to undeviating courtesy, honesty, and responsibility in one's dealings with customers and associates, plus a level of excellence that goes over and above the commercial considerations and legal requirements."

http://www.businessdictionary.com



Professionalism

- Ethical Behavior
 - 60,000 licensed PEs
 - ~750 Cases opened
 - 70% resolved with Voluntary Compliance
 - 12% Dismissed
 - Board action includes range of action up to revocation
 - Responsibility to Protect the Public



Professionalism scenario

- You are a licensed PE in multiple states working for a Registered International Firm.
- You have been asked by a client to perform an engineering analysis of the completed work of another Engineer in another state and provide a report to the client.



Professionalism scenario

• You had inadvertently let your license expire in the state where the project is located, but you live in Texas and your Texas license is Active and current.



Professionalism scenario True or False?

You would be in violation if you performed the work as described.

True. If the other state's licensing rules are like Texas rules, you would be in violation if you perform engineering for a project located in that state if your license is not current.

It does not matter where you are physically located.

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Professionalism scenario

- You made the choice to do the work.
- The state Board in that state found you in violation and took their lowest level enforcement action against you since you resolved it quickly.
- So... What are you expected to do now?



Professional Obligation

- A. Take no action. Informal actions do not need to be reported.
- B. Report the actions to the Texas Board at the time of your next renewal.
- C. Report the action to the Texas Board as soon as possible.
- D. Wait for the Board to contact you about the violation to see if it's necessary.
- E. None of the above.



Answer

• (

• § 137.5 (c) Each license holder shall notify the board in writing not later than 30 days after a misdemeanor or felony criminal conviction, or any sanction is imposed against a licensee by another state's engineering licensing board.



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



Enforcement Sanctions

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



Violations are Published

- 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



Outreach

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

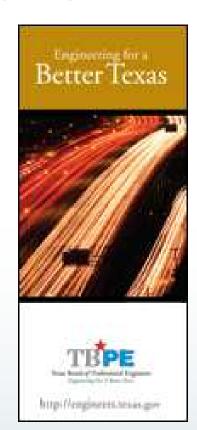


Outreach Publication

General

Engineering for a Better Texas

Agency overview and history





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



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



Outreach Publication

Government

When is a Professional Engineer required on a project?

Flowchart to assist building and Code compliance officials.



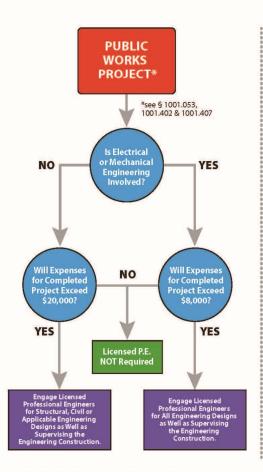


When is a **Professional Engineer** required on a project?

COMMERCIAL



Is It Over 8 Units? YES



& PRIVATE PROJECTS* NO NO YES NO *see § 1001.056 Is It Over 4 Units? Licensed P.E. Stories? NOT Required YES NO YES Is It Over Two Stories? Engage Licensed Professional Engineers for the Engineering Designs of Structural, Civil, **YES** Electrical and Mechanical (Heating, Ventilating Air NO Conditioning and Plumbing) or any Other Systems as Appropriate. Apartmen Dwelling or a or Condo? Farm or a (The Supervision of the Ranch? **Engineering Construction is** Optional) V NO YES Other YES Over One Story? ₩ NO YES Is It Ove Licensed P.E. NOT Required 5000 Sq Ft Floor Area? NO **Engage Licensed Professional** Engineers for the Engineering Designs of all Span Support Does It Have a Spa >24 Ft? Members, Including the Foundation NO

YES

This flowchart is intended for guidance purposes only and the Texas Engineering Practice Act and Rules govern final interpretation. Local codes and ordinances may be more restrictive as long as not in conflict with the Texas Engineering Practice Act and Rules. Visit http://engineers.texas.gov/downloads.htm for a copy of the Texas Engineering Practice Act and Board Rules and download this diagram.



Seal

scenario

- You are a contract employee for a Firm that is lead on a project has been overseeing all aspects of the design and construction.
- The lead engineer you're working under has a severe health issue is keeping him from the job for an extended time at the same time that there is a deadline for plan submission.



What should a Texas PE do?

- A. Ask an employee under his supervision to copy his seal and digital signature from the shared drive and use them.
- B. Have the documents sent with his seal and assure the authority that he'll come in to sign them later.
- C. Mark the plans as "preliminary"
- D. Negotiate a new deadline
- E. Sign and seal the plans yourself before the deadline.



Best Answers

- C or D Mark as preliminary or renegotiate the deadline
- 137.33(d): License holders shall take reasonable steps to ensure the security of their physical or electronic seals and electronic signatures;
- 137.33(e): Preliminary documents are not sealed.
- 137.33(f): Sealed documents require a signature.
- Only the licensee may use his or her seal.
- 137.33(a): A PE can only sign and seal their own work or work under direct supervision.



A Twist

• What happens if the PE never returns to work?

True or False?

Another PE can sign and seal the work if the PE performs sufficient calculations to verify the accuracy of the engineering work and make it his or her own work.

True!



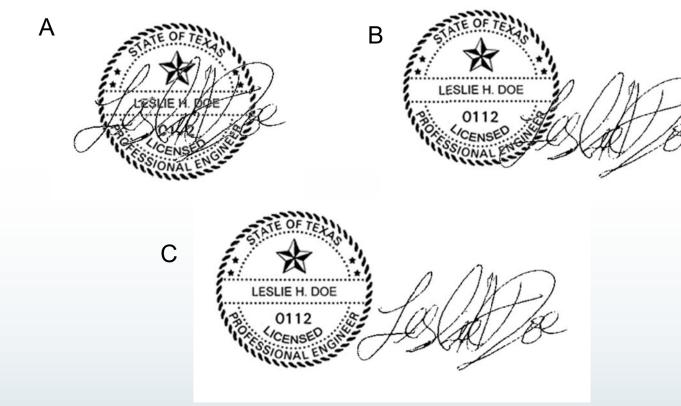
More questions

- If you were asked to review, sign and seal the work, can you do it as a Contract Employee?
- Yes.
- What Firm name should be on the document?
- As a contract employee for a company, Board rules would consider you an employee, so you can use the Firm name and number on a document unless the work is subcontracted to you as a separate company (with a separate firm registration).



Seals

Which of These is Correct?



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And the best answer is?

- B or C (with the date added)
- 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.



Continuing Education

Scenario

- You have been licensed for years and have always had more than enough hours for each renewal.
- You misplaced your renewal reminder and the expiration date is in a few days.
- You were busy and haven't completed any continuing education activity this year.



Continuing Education

What should a Texas PE do?

- A. Go online and renew without completing the Continuing Ed hours and try to take some courses as soon as you can.
- B. Keep working, wait to renew until you have the Continuing Ed hours which could be a few weeks and then renew.
- C. Check your records from last year to see if you had extra hours.
- D. Call the board and ask for an extension.
- E. None of the above.



Answer

- **C** You need to have the Continuing Education hours prior to renewing. You can carry forward up to 14 hours from one renewal period to the next, excluding the hour of ethics.
- Self study is limited to 5 hours and can be used for ethics.
- If you don't renew, your license is delinquent and you cannot practice.
- If you do renew and certify that you have completed
 Continuing Ed but have not, your license is subject to censure.
- Renew in ECHO. It's immediate and you get confirmation.



Continuing Education

- 15 hours includes no more than 5 hours of selfstudy and must include one hour of ethics
- Random audits ongoing
- Keep documentation for 3 years
- Over 65 not exempt
- Fines as high as \$5,000; separate violations for claiming Continuing Ed without documentation or not responding to Board.



Professional Services Procurement Act (PSPA)

- Qualifications Based Selection (QBS) for engineering on public projects
- Responsibilities of Professional Engineers
- Responsibilities of Public Officials in RFQ / RFP process



Outreach Publication

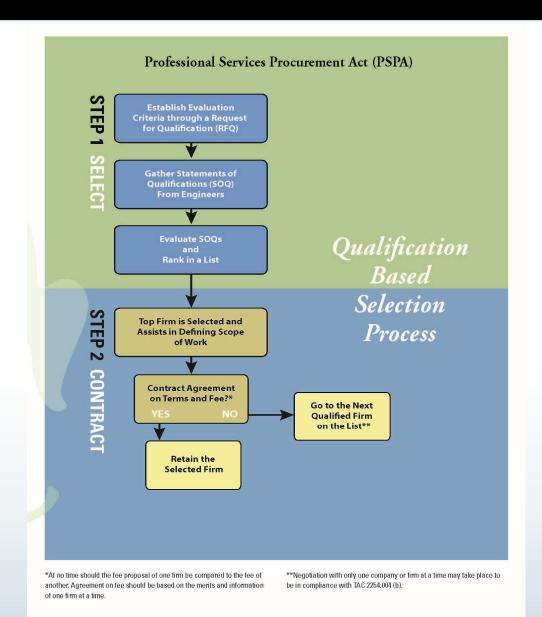
Government

What is the Professional Services
Procurement Act?

Flowchart to assist building and code compliance officials.









PSPA

scenario

The local Independent School District has posted a Request For Qualifications (RFQ) for engineering services to design a new Auditorium/Gym. Included in their RFQ is a requirement for the firm to include an itemized list of employees and their salaries in a sealed envelope to be opened after selection.



PSPA

scenario

- As a properly registered firm with licensed engineers your firm wants to respond to this RFQ for consideration.
- As the licensed professional engineer responsible for responding to such RFQs you prepare your firm's credentials and experience into a proper response.



What is the <u>least appropriate</u> response?

- A. Include the list of your employees with the required salaries in a sealed envelope.
- B. Include a list of your employees without salaries in a sealed envelope.
- C. Refuse to respond to this RFQ because the list of employees salaries is a violation.
- D. Notify the ISD that they are in violation.
- E. Notify the Texas Board of Professional Engineers.



Answer

• A – According to Board Rule, §137.53, it is a violation to provide "cost and/or pricing information or any other information from which pricing or cost can be derived", prior to being selected. Sealing the envelope is not an exception to the rule.



Better Options

- D As a first alternative, notify the ISD that it is a violation for you to respond completely as requested. You should also inform them that their request is not consistent with the PSPA. It could just be a misunderstanding.
- B (response without salaries) a viable option, but you should include why you have excluded the list, understanding that they may disqualify you.
- C (not responding) means you won't be in the running. This also means the ISD would never be aware of the law.
- E Contacting the TBPE is always an option, but may not be necessary. The Board may be able to help convince the ISD to issue an amendment prior to RFQ response opening.



Outreach Publications



Applicants

How to Become a Licensed P.E.

Benefits of Being a Professional Engineer.





Exemptions from Licensure

- Private Entities (Manufacturing, Industry, etc)
- Privately owned Public Utilities

License not required for engineering work on company (or utility) property or products with no Seal required.



Exemptions from Licensure

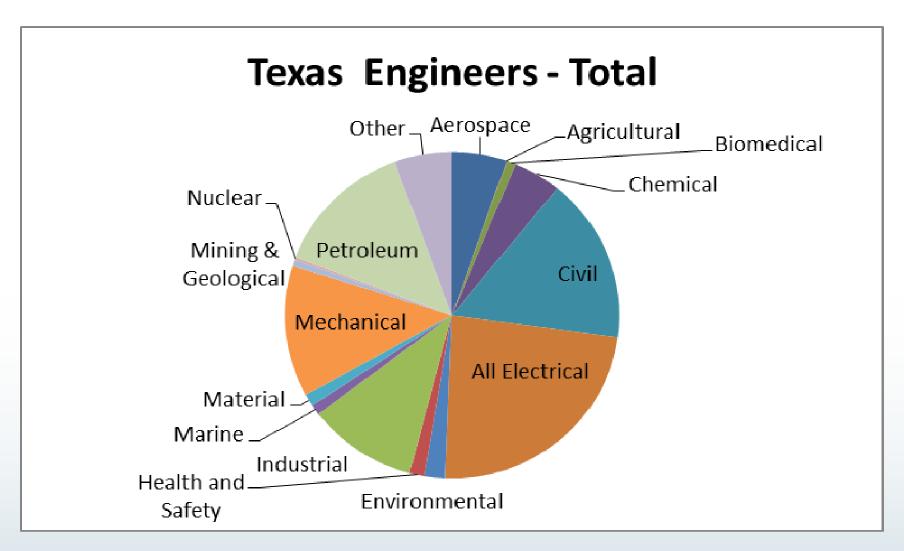
Did you know???

Only about 20% of US engineers are licensed.

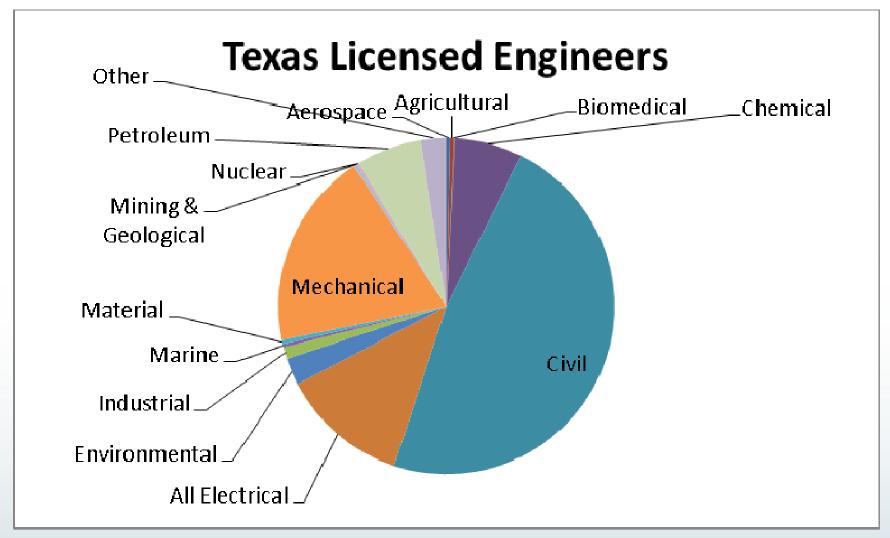
Bureau of Labor Statistics (2013)

- 178,000 engineers in Texas (20% w/ Active licenses)
 - Civil 23,500 in Texas (70% w/ Active licenses)
 - Petroleum 20,000 in Texas (11% w/ Active licenses)
 - Industrial 15,000 in Texas (2% w/ Active licenses)









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Industry Exemption

scenario

- You are a Texas EIT, but have not yet applied for a license.
- You work for a staffing firm that places employees in engineering and technical positions.
- You got an appointment working for a large Chemical manufacturer.
- Process engineers on staff are not licensed.
- Your work will be related to building design exclusively on company property.



Industrial Exemption

True or False?

A Texas PE license is not required for the work as described because your work is covered by the Industrial Exemption.

True. The exemption in the TEPA pertains to the manufacturing, oil and gas, etc. companies, their employees or <u>others under</u> <u>their direct control</u>. A license is not required.



Industrial Exemption

True or False?

The staffing firm you work for is required to have a firm registration.

False – Practicing under the industrial exemption, Firm registration is not required.



Industrial Exemption

True or False?

If you were a licensed PE working for a staffing firm placed in the same position, you are required to use your engineering seal on all of your work.

False – If the work is exempt under the Engineering Practice Act, sealing the work is not required even when performed by a licensed PE.



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



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!



Policy Advisory Opinions

- Provision Added to TEPA in 2003
- Allows Board to develop formal written interpretations of law and rules
 - Specific or hypothetical situations
 - Interpretations 'Gray Areas'
- Over 30 interpretations for a variety of subjects
 - Water Quality Planning, Power Poles, Use of PE Title, Fire Alarm / Sprinklers, PSPA – Contractors, Building Commissioning, etc.

Engineering for a better Texas



Policy Advisory Opinions

- Information
 - All Policy Advisories at:
 - http://engineers.texas.gov/policy.htm
 - How to submit PAO Request / Forms at:
 - http://engineers.texas.gov/Policy Advisory.htm



Legislative News and

Rulemaking

Engineering for a better Texas



Legislation 84th Session (2015)

- Bills affecting engineering or the Engineering Practice
 Act were tracked on the TBPE website
 - Professional Fee repeal
 - Windstorm
 - PE Indemnification related to state contracts
 - Structural Engineering
 - SDSI changes



Passed Legislation - 2015

- Professional Fee Repeal (House Bill 7)
 - Eliminates \$200 annual fee
 - Affects license renewals and new licenses issued
 - Effective September 1, 2015
 - Automatically applied to renewals



2013 Legislation Changes

SB 204 – Agency Sunset Bill

- Enforcement
- Criminal History Record Checks
 - 50,000 Licensees and Applicants submitted prints
 - 4,300 Had some sort of incident of Texas or FBI record and were reviewed by staff
 - 6 Enforcement cases opened for licensees
 - 50 Applications required additional review or Board Action



New Rules - Decoupling

Adopted February - Effective May, 2016

- Allows PE exam to be taken while experience is being obtained. Must be a Texas EIT.
- Increased flexibility for applicants
- Does not reduce licensing requirements.
- Requires system modifications for tracking
- EIT application to be online



TBPE Initiatives

Engineering for a better Texas



Engagement – Future Engineers Advisory Committee

- Outreach to young / new engineers
- Consists of EITs and new PEs
- Advising on:
 - Communications with young engineers
 - Application issues
 - Future initiatives with board



Engagement – Professional and Technical Organizations

- Rule 137.63(a) [Engineers] should attempt to enhance society's awareness of engineers' responsibilities to the public and encourage the communication of these principles of ethical conduct among engineers.
- Training and Continuing Education
- Engineering Policy
- Latest Technical Information
- Engineering Networking / Mentoring / References



Technical Organizations

- Involved in technical issues in engineering
- Organizations by branch of engineering
- Training
- Conferences
- Codes and Specs
- Research
- Local, regional, student branches



Technical Organizations

- ASCE American Society of Civil Engineers -<u>http://www.texasce.org/</u>
- IEEE Institute of Electrical Engineers http://ieeer5.org/
- ASME American Society of Mechanical Engineers -<u>https://www.asme.org/</u>
- AIChE American Institute of Chemical Engineers http://www.aiche.org/
- SEAoT Structural Engineers of Texas http://www.seaot.org/
- And many, many others...



Professional Organizations

Texas Society of Professional Engineers (TSPE) – <u>www.tspe.org</u>

- All branches of engineering
- Represents the individual PE
- Focus on the profession as a whole
- Engineering Policy / Legislative Issues
- Example: \$200 fee removal
- State branch of NSPE



Engagement - Webinars

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



Outreach – continuing excellence

Fiscal Year	Attendees	Presentations
2012	7,327	166
2013	11,559	177
2014	14,866	155
2015	19,751	150

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



Thank You

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http://engineers.texas.gov/outreachsurvey

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