

Texas Board of Professional Engineers

Engineering Practice Update

January 11, 2007

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Deputy Executive Director

Agenda

- Engineering Ethics
- What's new at the Board
- Rule Changes
- Updates and Reminders
- Compliance and Enforcement



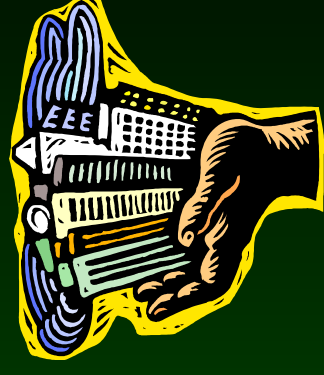
Why are Engineers Bound by Ethics?

- Engineers design and build systems that can harm the public.
- Engineers are expected to look after the welfare of the public.
- PE Seal means a design, project, or report protects the public.

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

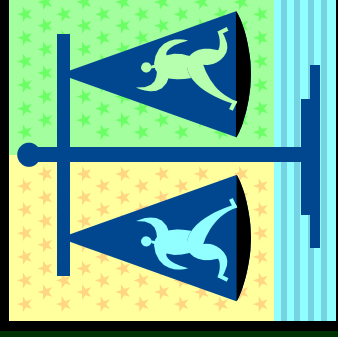
Engineering Ethics Review - Law & Rules



- PE is entrusted to protect the health, safety, property, and welfare of the public.
- PE shall not perform an engineering function that is fraud, gross negligence, misconduct, unethical, or illegal and will report the same.
- Misconduct if statements are fraudulent, deceitful, or misleading.

Engineering Ethics Review - Law & Rules

- PE shall engage in all activities in an honest and ethical manner.
- PE shall only practice within their area of competence .
- PE shall not perform duties not qualified by education or experience.



Engineering Ethics Review - Law & Rules

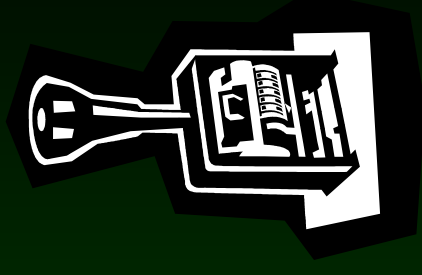
- Area of Competence
 - ◆ Defined by Engineer
 - ◆ Supported by:
 - ◆ Education
 - ◆ Experience
 - ◆ Exams

Engineering Ethics Review - Law & Rules

- Licensure as a Professional Engineer (P.E.)
 - ◆ Education
 - ◆ BS in engineering or related science
 - ◆ ABET accredited programs
 - ◆ Experience
 - ◆ Minimum 4 years practice
 - ◆ Exams
 - ◆ FE
 - ◆ PE

Engineering Ethics Review - Signature and Seal

- Seal ensures competent person designed and delineates work done.
- License holder will seal only work done by them or performed under their direction.
- A PE may not seal if license is inactive, expired, delinquent, revoked, or suspended.

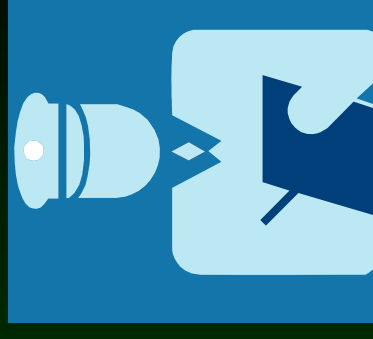


Engineering Ethics Review - Signature and Seal

- Plan Stamping:
 - ◆ Signing and Sealing a design that you did not perform or oversee
 - ◆ Often offered for a fee
 - ◆ Often requested for permitting or other legal reasons
 - ◆ **THIS IS ILLEGAL!**

Engineering Ethics – Law & Rules

- Disciplinary action for:
 - Knowingly endangering the public
 - Using seal when license is not active
 - Altering a design of another PE without notification to the original PE



Board Member Changes

- 5 Board members left Board during 2006
- Governor appointed Govind Nadkarni, as Chairman (previously vice-chair)

Board Member Changes

New Members:

- Elsie Allen
(Fort Worth, public member)
- Daniel Wong, P.E. PhD.
(Sugar Land)



10/17/2006

Texas Board of Professional Engineers

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Board Member Changes

New Members:

- Kem Bennett, P.E., PhD.
(College Station)
- Jim Greer , P.E.
(Fort Worth)



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Board Member Changes

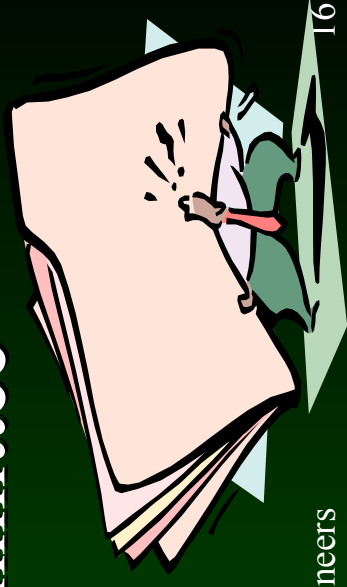
New member:

- Edward L. Summers, PhD.
(Austin, public member)



Rule Changes - Exam Waivers

- Rule change effective Jan 1, 2006
 - ◆ Waivers of PE exam allowed only for:
 - ◆ PhD Engineering Educators
 - ◆ P.E.'s licensed in another jurisdiction
 - ◆ Waivers of FE exam still available
- Ad Hoc Waiver review committee



Rule Changes – 12/10/06



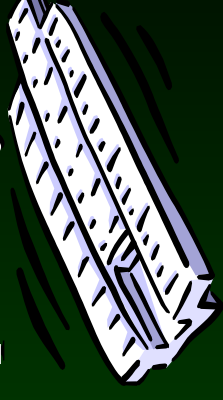
- Areas of Competency §133.97
 - ◆ Requested by license holder
 - ◆ Approved by ED/Director of Licensing
 - ◆ Required Documentation:
 - ◆ Additional education (beyond initial degree)
 - ◆ 4 yrs additional experience w/ PE reference
 - ◆ Additional PE exam

Rule Changes – 12/10/06

- Areas of Competency §133.97
 - ◆ Current records will be updated by request and encouraged thru outreach
- Reminders:
 - ◆ Review and Update your branch listing on the website / Board records
 - ◆ Only practice in area of competence!

Rule Changes – 12/10/06

- EIT application expiration-will be one year from application lapse
- Voluntary Surrender of License-will not require certificate to be returned
- New Treasurer position created on Board
- Board discretion on collusion penalty



Rule Proposals



- Timing of the P & P exam
- Currently taken after 4 yrs experience
- May allow it to be taken after graduation for first try – 3 more tries after 4 yrs experience
- Argued that it's more of an academic test
- Rationale is to bolster pass rates and get more engineers on the path to licensure
- Board is asking for feedback on proposal

Rule Changes – 1/1/2006

- Firm Registration Requirements
 - ◆ All firms must have at least one full time P.E. on staff to offer engineering services to the public
 - ◆ A sole proprietor meets the requirement for a full time P.E.



Rule Changes – 1/1/2006

- Voluntary Surrender of License
 - ◆ A license holder in good standing may voluntarily surrender their license
 - ◆ License can only be reinstated by re-applying under current rules.



Rule Changes – 3/20/2006

- “Retired” as an acceptable term for Inactive status
- Change in Sanction Table to include an Administrative Section



Rule Changes – Effective 6/20/2006

- Firm Registration – Eliminates 30 day amnesty period to get registered
- NAFTA rules – requires Canadian or Mexican citizenship for Comity license
- Waiver rules – Clarified language



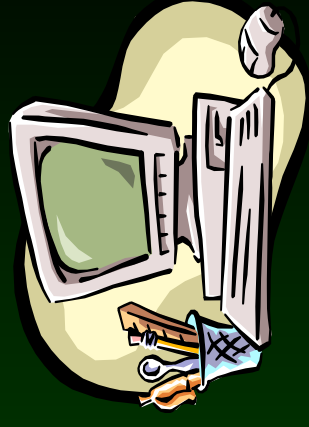
Rule Change - Effective 9/4/2006

- Split up §137.57 so that fraudulent, deceitful and misleading are separate citations.
- Adjusted sanction table accordingly



Online Renewal System

- ECHO System
- Allows you to update information
 - ◆ Contact Info
 - ◆ CEP
 - ◆ Employment
- Allows you to renew via credit card
- Allows you to get a temporary pocket card on-line (NEW!)
- Over 30% Usage in FY 06
- Next phase will be online firm renewal



Exam Irregularities

- NCEES collusion analysis
- NCEES withheld grades pending investigation
- 18 examinees identified in Texas for 2 exam cycles
- 4 resulted in retake of exam from Oct 05 and 2 banned from exam for 2 years from April 06
- Improvements needed to exam administration



Software Engineering Taskforce

- Comprises Educators, Practitioners and Board staff
- Adopted charter and comments to NSPE
- Looking at alternatives for exams
- Evaluating scope including what needs to be sealed
- Looking into the Canadian model



Controversy on Building Design

- DM-161
- TBPE Policy Advisory Opinion
- Joint Advisory Committee
- AG opinion request GA-0391



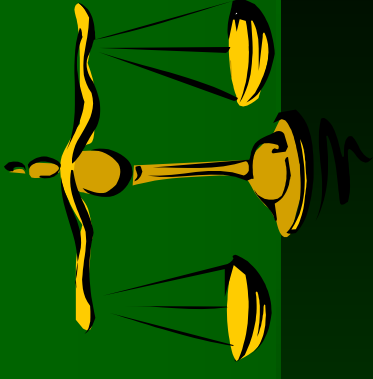
Results of GA-0391

- Engineering and Architecture are distinct
- There is overlap concerning building design
- The statutes and DM-161 do not answer whether engineers can do Comprehensive Building Design
- Human Occupancy does not distinguish
- The answer depends on if engineering education, training and experience is needed which is a question of fact
- Therefore TBPE Policy Advisory

Opinion has been withdrawn

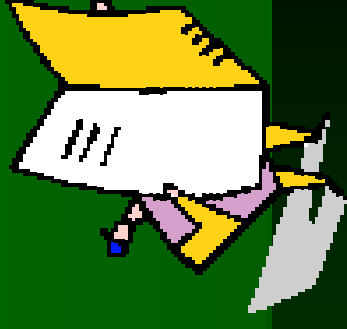


Policy Change



- Violations in other states
- Reported thru NCEES and by other Boards
- Had been considered a violation in Texas as well –Cascade effect in reporting
- New policy is to allow ED Discretion
- Unless violation rises to level of significance- only a letter will be issued

Rule Reminders

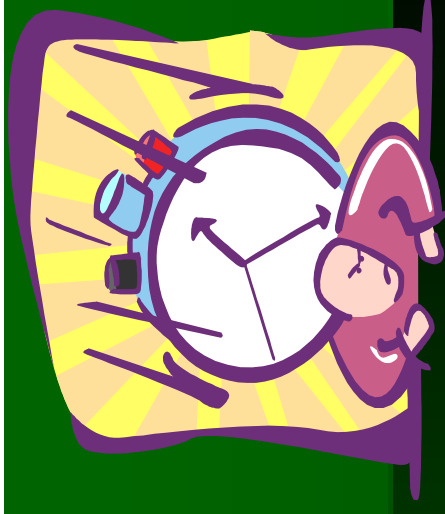


- Reference Statements
 - ◆ Experience is a vital component of licensure
 - ◆ Board relies on PE references
 - ◆ Give fair, honest, accurate evaluations
 - ◆ Do not give ‘buddy’ references
 - ◆ Do not retaliate

Rule Reminders

- Reference Statements
 - ◆ PE not required to provide a reference
 - ◆ Do not provide reference if not comfortable with applicant
 - ◆ “Cold Calls”
 - ◆ Not familiar with work
- ◆ Reference Form
- ◆ Review SER - edit if necessary!

Rule Reminders



- **On-Time Renewals**
 - ◆ Be sure to renew your license on time or will be **DELINQUENT**.
 - ◆ **Cannot practice engineering** when license is delinquent, including sealing documents.
 - ◆ Enforcement cases can be opened.
 - ◆ It is engineer's responsibility to renew on time – make sure address/contact info is correct.
 - ◆ If license is delinquent for 2 years, it will expire and you must re-apply for licensure.

Rule Reminders



- Updating Personal Information
 - ◆ December 2005 roll-out of Online Profile and Renewal System
- Required to update address, employment, and criminal conviction information - can be violation
- Required to update Firm Registration Info also

Contracts

- **Many cases related to contract disputes**
 - ◆ **Lack of clear and concise contract**
 - ◆ **No signed contract**
 - ◆ **Difference in expectations between client and PE**



Contracts

- ◆ **Contract needs:**
 - ◆ **List of deliverables**
 - ◆ **Timeline**
 - ◆ **Signatures**
 - ◆ **Be Clear**



Contracts

- ◆ Possible Violations:
 - ◆ Faithful Agent for employer or client
 - ◆ Misleading statements
 - ◆ Fraud
- ◆ If the client can't get resolution directly with you, they come to us.



Reports

- ◆ Another common factor in cases is disputes over reports.
- ◆ Tips:
 - ◆ Back up statements with **FACTS** and **DATA**.
 - ◆ Include the **FACTS** and **DATA** in the report.

Reports

- ◆ Tips:
- ◆ Don't just use a "boilerplate" report without specifics.
- ◆ Only perform work in your area of expertise.
- ◆ Clarify who did what

Reports

- ◆ Tips:
- ◆ Don't copy or plagiarize!
- ◆ Actually take your own measurements / do analysis
- ◆ Refrain from ad hominem attacks on other engineers – stick to the facts

Continuing Education

- 15 PDHs required each year
- 14 PDHs (over the 15 required) can roll over to the next year
- 1 hour in ethics (required each year-no roll over)
- Can now track online (ECHO)



Continuing Education

- First year of audits completed
- Random Audits
- Board takes CEP seriously!
- Example: \$2500 penalty for no CEP
- Be sure to have your documentation when you renew!



Compliance & Enforcement

- Reporting:
 - ◆ Board relies on PE's and the public to inform of violations
 - ◆ Confidential Reporting Process
 - ◆ Forms Available on Website at:

<http://www.tbpe.state.tx.us>



C&E Statistics



- **FY 2005-2006**
 - ◆ 1636 Cases Opened
 - ◆ 926 Opened by Staff
 - ◆ 710 Opened at Request of Public
 - ◆ 1662 Cases Closed
 - ◆ 1055 Voluntary Compliance
 - ◆ 216 Disciplinary Actions
 - ◆ 391 Dismissed / No Violation

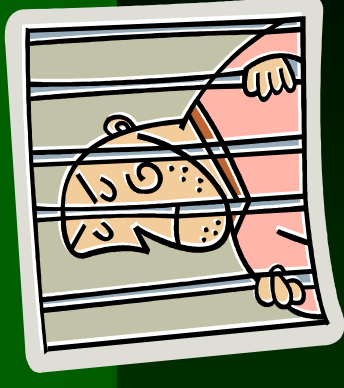
C&E Statistics



- **FY 2005-2006**
 - ◆ **Cases Opened**
 - ◆ **720 - Unlicensed Practice ↑**
 - ◆ **206 - Corporate Name**
 - ◆ **164 - Cases against PE's**
(Disciplinary Cases)
 - ◆ **53 - Illegal Use of Title**

C&E Statistics

- **FY 2005-2006**
 - ◆ **Disciplinary Actions**
 - ◆ 105 Admin Penalty
 - ◆ 14 Formal Reprimand
 - ◆ 55 Informal Reprimand
 - ◆ 16 Cease & Desist (non-PE)
 - ◆ 20 Probated Suspension
 - ◆ 4 Suspension
 - ◆ 2 Revocation

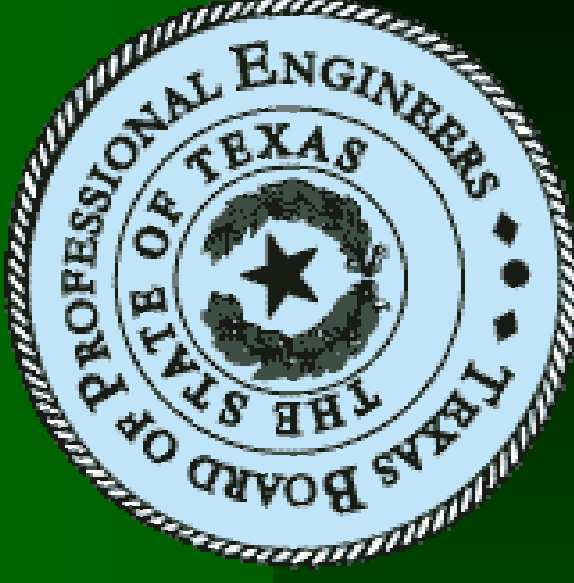


C&E Statistics

- **Disciplinary Actions (FY2005-2006)**
- ◆ Competency Issues
- ◆ Plan Stamping
- ◆ Code Violations – PE must know and follow applicable codes
- ◆ Practice on Delinquent/Expired License
- ◆ Firm/Sole Proprietor Registration or Renewal
- ◆ Sealing / Lack of Sealing / Improper Sealing



Contact TBPE



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