

# Notes - Ethics in the Practice of Professional Engineering

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## Disclaimer

The speaker is expressing his own views and opinions on the matters being discussed and does not represent the official views of the State Board of Registration for Professional Engineers, the Indiana Society of Professional Engineers, or Purdue University.

## Overview

- Why Ethics?
- Codes of Ethics
- Rules of Professional Conduct in Indiana Statutes and Rules
- Making Value-laden Decisions
- Professional/Technical Societies
- Ethical Health Fitness
- Summary
- Quiz
- Evaluation

## Expectations

- By the end of this session you will:
- Know about Codes of Ethics and the roles they play
- Be aware of the Indiana Statutes and Rules associated with professional conduct in engineering practice
- Know how to access them.
- Have a systematic process for solving ethical dilemmas
- See the value of professional and technical organizations in the engineering profession

## Why Ethics?

- It is a matter of ....
- happiness/ contentment/ fulfillment

## Aim of all ethical decision making - happiness/ contentment/ fulfillment<sup>1</sup>

- Lowest stage - decision making focuses on the individual;
- Intermediate stages – decision making guided by Codes, Rules and the Law

- Highest stage on all parties and over all time.

## Ethical behavior

- Contract among affected parties
  - Unwritten understanding...
  - Agreed behavior among individuals
  - Taught by our upbringing
  - “Gentlemen’s Agreement”
- Written Contract – defined focus
  - Professional Code of Ethics
  - Established and administered by a profession
- The Law
  - Federal, state, and local Statutes and Rules
  - Administered and enforced by officials: fines and penalties

## Codes of Ethics

Established by membership of professional societies  
Standard Format (especially among engineering organizations)

- Preamble
- Fundamental Canons
- Rules of Practice
- Professional Obligations

Example: National Society of Professional Engineers (NSPE)

(<http://www.nspe.org/Ethics/CodeofEthics/index.html>)

## Indiana Law Associated with the Practice of Engineering

- Established by the Legislature – Indiana Code (IC 25-31)  
(<http://www.in.gov/legislative/ic/code/title25/ar31/>)
- Implemented by Rules established by the State Board of Registration for Professional Engineers – Administrative Code (864 IAC)  
([http://www.in.gov/legislative/iac/iac\\_title?iact=864](http://www.in.gov/legislative/iac/iac_title?iact=864))
- IC 25-1-11-5 - Practitioner compliance with professional standards; findings meriting disciplinary sanctions; fraud or material deception (Applies to all professions in Indiana)
- 864 IAC Rule 11 – Professional Conduct (Applies to engineering practice by licensed engineers)

<sup>1</sup> Jean Piaget and Lawrence Kohlberg as reported by :  
Veslind, P. A., and Ende, E., "Ethics in the Field," Civil Engineering Magazine, Vol. 55, No. 12, December, 1985, pp. 64-66.

### **IC 25-1-11-5 – Indiana law that applies to all professions in Indiana**

Professional Standards - A practitioner shall comply with the standards established by the board regulating a profession. A practitioner is subject to the exercise of the disciplinary sanctions under section 12 of this chapter if, after a hearing, the board finds that:

- (1) a practitioner has:
  - (A) engaged in or knowingly cooperated in fraud or material deception in order to obtain a license to practice, including cheating on a licensing examination;
  - (B) engaged in fraud or material deception in the course of professional services or activities;
  - (C) advertised services or goods in a false or misleading manner; or
  - (D) been convicted of a crime or assessed a civil penalty involving fraudulent billing practices;
- (2) a practitioner has been convicted of a crime that: has a direct bearing on the practitioner's ability to continue to practice competently; or is harmful to the public;
- (3) a practitioner has knowingly violated a state statute or rule or federal statute or regulation regulating the profession for which the practitioner is licensed;
- (4) a practitioner has continued to practice although the practitioner has become unfit to practice due to:
  - (A) professional incompetence, including undertaking professional activities that the practitioner is not qualified by training or experience to undertake;
  - (B) failure to keep abreast of current professional theory or practice;
  - (C) physical or mental disability; or
  - (D) addiction to, abuse of, or severe dependency on alcohol or other drugs that endanger the public by impairing a practitioner's ability to practice safely;
- (5) a practitioner has engaged in a course of lewd or immoral conduct in connection with the delivery of services to the public;
- (6) a practitioner has allowed the practitioner's name or a license issued under this chapter to be used in connection with an individual or business who renders services beyond the scope of that individual's or business's training, experience, or competence;
- (7) a practitioner has had disciplinary action taken against the practitioner or the practitioner's license to practice in any state or jurisdiction on grounds similar to those under this chapter;
- (8) a practitioner has assisted another person in committing an act that would constitute a ground for disciplinary sanction under this chapter;

(9) a practitioner has allowed a license issued by a board to be:

- (A) used by another person; or
- (B) displayed to the public when the license has expired, is inactive, or has been revoked or suspended; or

(10) a practitioner has failed to comply with an order imposing a sanction under section 12 of this chapter

### **Rule 11 – Professional Conduct (Rules of the Board that apply to the practice of engineering)**

Establishes requirements concerning ethical, economic, and legal principles and unprofessional conduct in the practice of engineering

- Agreement to abide by act and rules
- Knowledge of the Act and rules of the board
- Understanding that the practice of engineering is a privilege
- Primary obligation to protect the safety, health, and welfare of the public
- Perform engineering assignments only when qualified by education and experience in the specific technical field
- The engineer shall not affix the engineer's signature and/or seal to any engineering plan or document dealing with subject matter in which the engineer lacks competence
- The engineer shall be completely objective and truthful in all professional reports, statements, or testimony.
- The engineer, when serving as an expert or technical witness before any court, commission, or other tribunal, shall express an opinion only when it is founded upon adequate knowledge of the facts in issue, upon a background of technical competence in the subject matter, and upon honest conviction of the accuracy and propriety of the engineer's testimony.
- The engineer will issue no statement, criticisms, or arguments on engineering matters connected with public policy which are inspired or paid for by an interested party, or parties, unless the engineer has prefaced the comment by:
  - explicitly identifying himself or herself;
  - disclosing the identities of the party, or parties, on whose behalf the engineer is speaking; and
  - revealing the existence of any pecuniary interest the engineer may have in the instant matters.

**Conflicts of interest**

- Avoid them with employer or employer's clients
- When unavoidable, disclose the circumstances to the engineer's employer or client
- Disclose of conflicts of interest to employer or client
- Compensation from more than one party for same project
- The engineer shall not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties dealing with the engineer's client or employer in connection with work for which the engineer is responsible.
- The engineer shall not solicit or accept financial or other valuable considerations from material or equipment suppliers for specifying their products.
- When in public service as a member, advisor, or employee of a governmental body or department, the engineer shall not participate in considerations or actions with respect to services provided by the engineer or the engineer's organizations in private engineering practices.
- When in public service as a member, advisor, or employee of a governmental body or department, the engineer shall not participate in considerations or actions with respect to services provided by the engineer or the engineer's organizations in private engineering practices.
- The engineer shall not solicit or accept an engineering contract from a governmental body on which a principal, officer, or employee of the engineer's organization serves as a member.
- Payment of consideration to secure work prohibited; exception
- The engineer shall not offer to pay, either directly or indirectly, any commission, political contribution, gift, or other consideration in order to secure work, exclusive of securing a salaried position through employment agencies.
- The engineer shall seek professional employment on the basis of qualification and competence in the proper accomplishment of similar work.
- The engineer shall not falsify or permit misrepresentation of the engineer's or the engineer's associates' academic or professional qualifications.
- Use of name in fraudulent or dishonest venture

**Do you know your agency's or company's policy on offering or receiving gifts and services?****Reporting violations****IC 25-1-7 Investigation and Prosecution of Complaints Concerning Regulated Occupations**

Sec. 2. The office of the attorney general, under the conditions specified in this chapter, may receive, investigate, and prosecute complaints concerning regulated occupations.

- Sec. 4. All complaints must be written and signed by the complainant and initially filed with the director. Except for employees of the attorney general's office acting in their official capacity, a complaint may be filed by any person, including members of any of the boards listed in section 1 of this chapter.
- Indiana Attorney General's Office, Consumer Protection Division  
<http://www.indianaconsumer.com/filecomplaint.asp>

**Recognizing Ethical Problems**

- We have an ethical problem when we:
- Have "that feeling in the pit of our stomach"
- Start rationalizing about a decision
- Use the phrases
  - "everyone does it"
  - "its not that important"
  - "that could hurt his/her feelings"
  - \_\_\_\_\_???

**Systematic Approach to Ethics**

- Ethical thinking - "organized, reasoned analysis of value-laden problems."

**How do you solve ethical problems?****Making value-laden decisions**

Generated by the CE394 class on October 29, 1998

1. Realize that we have a problem
2. Define the problem (Who - stakeholders, What, When, Where, Why, Evidence)
3. Options available - Possible solutions
4. Weigh the consequences (Pros. vs. Cons.)
5. Compare to others - Code of Ethics
6. Compare to the law (IC 25-1-11-5 and 864 IAC Rule 11)
7. Does it feel right? (NY Times rule. What does your gut tell you? The Golden Rule)
8. Ask someone else
9. Choose what to do
10. Act on it
11. Learn from experience

**Ethical Decisions are Tough!**

- Not always “black” or “white”, but most often shades of “gray”
  - Personal loyalties/feelings involved
  - No-win situations
  - Job or livelihood at stake
  - Conflicting guidelines
  - \_\_\_\_\_???
- Use a systematic approach for resolving value-laden problems (Use the process developed in CE 394)
  - Consequences of unethical behavior can be disastrous
  - Stay Ethically fit

**Ethical Health Fitness**

- Balance of physical, emotional, social, intellectual, and spiritual health
- Take time to “sharpen the saw” (Covey) through reflection, study, etc.
- Discuss issues with other professionals
- Consistency of behavior in small things as well as big
- \_\_\_\_\_???

**Ethics References****Purdue Sites**

<http://www.purdue.edu/odos/administration/integrity.htm>  
<http://bridge.ecn.purdue.edu/~drnevich/CE394/Ethics/ethicsinfield.pdf>

**The National Institute for Engineering Ethics (NIEE)**

<http://www.niee.org/>

**The National Society of Professional Engineers**

<http://www.nspe.org/ethics/>

**The Indiana Society of Professional Engineers**

<http://www.indspe.org/newsletter.html>

**The American Society of Civil Engineers**

<http://www.asce.org/Content.aspx?id=15290>

**Summary**

- Ethical behavior benefits everyone
- Ethical behavior may be:
  - Unwritten agreements
  - Codes established by professional societies
  - Statutes and Rules
- Upon renewal of PE license, the person
  - Acknowledges familiarity with the Law and Rules
  - Agrees to abide by them
- Engineers need to be aware of agency and company policies concerning gifts
- Codes of Ethics are essential for professionals
- Professional/technical societies and professional licensing laws and rules determine the ethical practice of engineering