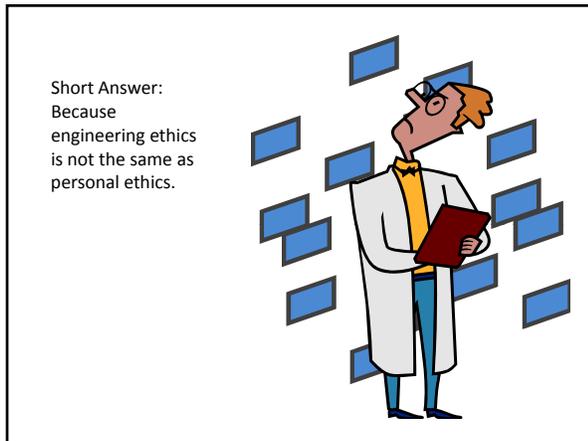


Engineering Ethics



- ### Three Aspects
- 1. Common Morality
 - 2. Personal Morality
 - 3. Professional Ethics

- ### Common Morality
- The dominant set of moral ideas in our culture, based historically on Judeo/Christian Morality

- ### Two Levels
- First order: Principles and judgments about what is right and wrong (acts themselves)
 - Second order: Principles about how we judge individuals (people who perform the actions) These are influenced by intention, voluntary/involuntary, and culpable/inculpable ignorance.

Example

- An action can be wrong (killing) but an individual might not be blameworthy, or as blameworthy, because the individual was
 - 1) forced to do it
 - 2) believed the action was right
 - 3) did not intend to do it

Personal Morality

- Usually this is closely related to Common Morality but may differ, especially in controversial areas. You may think Euthanasia is ok even though common morality says (or has said) it is wrong.

Professional Ethics

- Professional Ethics are governed by impersonal standards that are created by their profession, stated in codes, and enforced by law.
- Professional standards are supposed to enable engineers to better serve the public.
- These standards are applied to all engineers regardless of their personal morality.

Professional Ethics

- Requires a degree of separation (distance) from the client. One relates to them as a professional, not a person.
- Apply equally to all engineers so the client can count of the engineer to provide ethically responsible service, even if the client has no prior knowledge of the engineer.

Engineering Ethics

- Focuses on behavior (first order) not an intent or motivation (second order).
- Allows individuals to accommodate their own personal values to some extent. One can refuse services if it violates personal values.
- Are not independent of common morality.
- May not be detailed enough (ie, be honest)

Harry's case

- Harry works for a large manufacturer in the town of Greenville. His company employs half of this town, which is an otherwise economically depressed part of the country. Harry discovers his company is dumping carcinogenic chemicals into the local lake. The lake is the town's main source of drinking water. Harry is told that the company dumps these chemicals because disposing of them lawfully is so expensive that it would force the company to fold or move overseas.



Considerations

- Obligation to protect public health, safety, and welfare
- Obligation to neighbors to not harm their economic livelihood
- Obligation to protect employer's interests
- Obligation to self to protect career

Creative Middle Ways

- Find a third course of action that will allow you to satisfy all/more of the obligations.
- In Harry's case, find an inexpensive way to recycle the chemicals for continued use in manufacturing. Technical solutions are often "creative middle ways".

Sally's case

- Sally is working for a regulatory agency that reviews plans developed by engineers. She reviews Judy's plans, but wonders how/why they have Judy's signature when Judy has been in Africa for 3 months, out of touch. Judy is licensed as an engineer. In the design package, she sees signatures by Karen on parts of the work. Karen is not licensed.

Continued

- The project is of major importance to the community and needs urgent implementation. Should Sally raise questions about Judy's level of involvement with the design?

MN code of ethics for PEs

RULES OF PROFESSIONAL CONDUCT

1805.0100 PROFESSIONAL CONDUCT.

Subpart 1. **Purpose.** This rule of professional conduct is adopted for the purpose of implementing the laws and rules governing the practice of architecture, engineering, land surveying, landscape architecture, and geoscience including Minnesota Statutes, section 326.11.

Subp. 2. **Scope.** This rule is applicable to and binding upon each person, corporation, or partnership subject to the regulatory jurisdiction of the board and each person subject to the control of the licensee.

Subp. 3. **Imputed knowledge of professional responsibility.** Each licensee who holds a certificate of licensure issued by the board is charged with knowledge of this rule. In the exercise of the privileges and rights granted by the certificate of licensure, the licensee shall conform professional conduct to the public and to the board in accordance with the provisions of this rule, and shall, as a condition of licensure, subscribe to and agree to conduct the practice in accordance with the provisions of this rule.

1805.0200 PERSONAL CONDUCT.

Subpart 1. **Public confidence and personal integrity.** A licensee shall avoid any act which may diminish public confidence in the profession and shall, at all times, conduct himself or herself, in all relations with clients and the public, so as to maintain its reputation for professional integrity.

Major categories of Rules of Conduct

- Personal Conduct
- Conflict of Interest
- Improper Solicitation of employment
- False or Malicious Statements
- Knowledge of Improper Conduct by Others
- Action by Other Jurisdiction
- Employment on Basis of Merit
- Misconduct

NSPE engineering code



Code of Ethics for Engineers

Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public;
2. Perform services only in areas of their competence;
3. Issue public statements only in an objective and truthful manner;
4. Act for each employer or client as faithful agents or trustees;
5. Avoid deceptive acts;
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and confidence of the profession.

II. Rules of Practice

1. Engineers shall hold paramount the safety, health, and welfare of the public.

2. Engineers shall act for each employer or client as faithful agents or trustees.

3. Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment on the quality of their services.

4. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.

5. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.

6. Engineers in public service as consultants, advisors, or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services rendered or provided by them or their organizations in private or public engineering practice.

7. Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.

8. Engineers shall avoid deceptive acts.

9. Engineers shall not falsify their qualifications or permit misrepresentation of their or their associates' qualifications. They shall not overstate or exaggerate their responsibility in or for the

ASABE engineering code

CODE OF ETHICS OF ENGINEERS

THE FUNDAMENTAL PRINCIPLES

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

- I. using their knowledge and skill for the enhancement of human welfare;
- II. being honest and impartial, and serving with fidelity the public, their employers and clients;
- III. striving to increase the competence and prestige of the engineering profession; and
- IV. supporting the professional and technical societies of their disciplines.

THE FUNDAMENTAL CANONS

1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.
2. Engineers shall perform services only in the areas of their competence.
3. Engineers shall issue public statements only in an objective and truthful manner.
4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest.
5. Engineers shall build their professional reputation on the merit of their services and shall not compete unfairly with others.
6. Engineers shall act in such a manner as to uphold and enhance the honor, integrity, and dignity of the profession.
7. Engineers shall continue their professional development throughout their careers and shall provide opportunities for the professional development of those engineers under their supervision.

THE COMMUNICATOR

OFFICIAL PUBLICATION OF THE MINNESOTA BOARD OF ARCHITECTURE, ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE, GEOSCIENCE & INTERIOR DESIGN

2010 VOLUME 15, NUMBER 2



Letter from the Chair

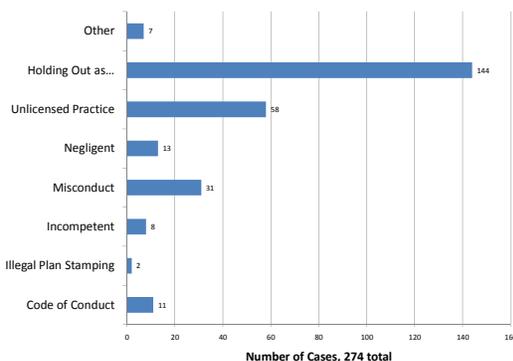
KRISTINE KUBUS, JD, PUBLIC MEMBER

In May, the Board welcomed three new members to service — David Kersch, PE; Peter Miller, PSE; and Marjorie Pitz, L.A. Although they have only been serving a few months, we already owe them bountiful appreciation, as they have each jumped in to assist with the

INSIDE:

REEL WRITING.....P2

Minnesota Licensure Board 2001



Ethical Violations

- Plan stamping
- Kickbacks
- Unlicensed practice
- Working Outside Area of Expertise
- Negligent
- Gifts
- Truthful & complete statements, reports
- Lapsed license & signed documents

MN Licensure Cases

- Keep continuing education records – see case of Andrew Dahmen, Sept. 2009
- Robert Heil, Lapsed License, 2008
- Arlen Heathman, Negligence, 2008
- Marquis X. Erickson, Kickbacks, 2004

NRCS situation

- TAA system has all working under Brach's PE license
- Area engineers review work required to be performed by PEs, such as TSPs. Same standard for reviewer as for designer.
- Don't sign preliminary plans; put "DRAFT" on prominently

