

ENGR 401

Ethics and the Law

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Topics in Ethics

- What is Ethics in Engineering?
 - It is all about engineers' code of conduct with/reg.:
 - Clients and employers
 - Suppliers
 - Other engineers
 - The public
 - Competitive bidding
- On the legal side
 - What are the legal responsibilities
 - Case Law
 - Strict liability in tort

The Hierarchy

- Prime Directive:
 - *“An engineer has to act in the best interest of the society at large”*
- The hierarchy of engineer’s responsibility:
 - Society and the public (highest priority)
 - The law
 - The engineering profession
 - The engineer’s client
 - The engineering firm (employer)
 - Other engineers
 - The engineer (self)

Canons

- Statutes of personal conduct
 - Non-statutory
 - Non-mandatory
- Three-cannons for engineers
 - Perform services only in the engineer's area of expertise
 - Public safety and welfare held in highest regard
 - Enhance reputation of the engineering profession

Four Areas of Conflicts or Problems

- Clients & employers
- Suppliers
- Other engineers
- The public

Clients (and Employers)

- Assignment is given by a client or employee
 - Do not accept it unless you are competent
 - In terms of knowledge, skill, or time
 - Recognize your limitation
 - Protect the client interest
 - Do not be bound by what the client wants in the following instances:
 - Unsuccessful assignments (if you know for sure)
 - Dishonest and deceptive methods
 - Unethical means or ends
 - Unhealthy means or ends
 - Unsafe means or ends

Clients (2)

- You must be forthright about consequences
- Client confidentiality must be preserved
 - No unethical or illegal dissemination of information
- Must avoid conflicts of interest
 - Clear COI
 - Appearance of COI
- Sole source of income for a project should from the client
 - Don't take multiple payments for the same services rendered

Clients (3)

- If a client rejects a recommendation
 - Fully explain the consequences
- Fully and openly admit the client any errors made
 - This does not contract with the dictum that the service must be error-free

Suppliers

- Manufacturers + contractors = suppliers
- Shouldn't be any COI with them
- The suppliers who are cozy with you must know that there will be no special favors
- Do not, and must not accept or solicit gifts
 - Applies during, prior to or after any job
- Must enforce the plans and specs
 - These are developed on behalf of the client – so they must be
 - Definitive and specific
 - Complete from the drawings to the finished product

Suppliers (2)

- Don't take advantage of the suppliers
 - Suppliers should not be required to spend time of furnish material that are not called for in the procurement
- You should not unduly delay the performance of the suppliers
 - By extensions, release of payments to suppliers should not be delayed unduly

Other Engineers

- Should not maliciously attempt to injure
 - The professional reputation
 - Business practice, or
 - Employment positionof other engineers
- You should not review someone else's work while the other engineer is still employed
 - If you must, make that person aware of your review
- Shall not try to replace other engineer while the other engineer received employment or contract with the client

Other Engineers (2)

- Do not take advantage of the salaried position to compete unfairly
- Subject to legal and proprietary restraints
 - Publish and distribute information that would be useful to other engineers and the engineering profession

The Public

- Public SAFETY and WELFARE are to be held at highest regard – above personal gain
 - THIS IS THE PRIME DIRECTIVE
 - In design or other services, do not compromise on the safety and welfare of the public at large
 - Avoid working with projects that would violate this or any other thing that has questionable legal or ethical character

Engineering Profession

- Must uphold the honor and dignity of the profession
 - Refrain from self-laudatory advertising
 - Express opinions only in the areas of their knowledge
- When public statements are to be made, indicate on whose behalf you are making the statements
- Engineers should develop public knowledge and appreciation of the engineering profession and its achievement

Obligation to Self

- Engineers must keep their skills at the state of the art level
 - Continuing education is essential
 - Life-long learning...
- An engineer must notify proper authorities when a decision adversely affecting public safety and welfare is made

Contracting and Competitive Bidding

- Engineers and design firms may individually continue to refuse bid competitively on engineering services
- Clients are not required to seek competitive bids
- What about the federal, state and local statutes?
 - Engineers and their societies may lobby against the competitive bidding by public agencies
- Prohibition on CB in certain states?
 - Does it still exist????