



Your Ethics Toolbox:

Building a Framework for Ethical Decision-Making With Case Studies

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Learning Objectives

1. Explain ethics in general, what is unique to engineers, and what all of this means to you, the Professional Engineer.
2. Explain the relationship between NCEES and the State Boards.
3. Learn the Fundamental Canons of the NSPE Code of Ethics and apply them to case studies adjudicated by the NSPE Board of Ethical Review.
4. Earn (1) PDH toward your PE Registration continuing education requirement for ethics.*

*may not qualify for every state registration.

What is ethics?

Morals vs Ethics

- Morals are personal, ethics are collective.
- Morals and ethics don't always align.
 - Omerta: a code of silence about criminal activity and a refusal to give evidence to authorities.
 - A lawyer that reports his client has committed a crime.
- Ethics and the law don't always align.

NCEES

Established in 1891, "The NCEES is the national organization that develops **uniform model laws** and module rules for adoption by the member state-level boards, in addition to providing nationally normed examinations for engineers and surveyors."¹

The leadership includes members from the engineering and surveying licensing boards from **all 50 states**, the District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.

By **1984** all boards using national engineering examinations.



NSPE Code of Ethics

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.



NSPE Code of Ethics

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 usefulness of the profession.



Case Studies

Case Study #1

The Facts:

- State DOT policy says only the cost of unavoidable utility conflicts can be included in highway projects. The cost of other utility work must be paid by the local municipality.
- FacilityBoss (FB), a state DOT engineer, knows the water main serving Mabelvale is no longer big enough to serve the community.
- FB delegates the design of a Mabelvale highway project to intern I. M. Lerner, who avoids utility conflicts in the highway design.
- FB knows Mabelvale cannot afford the cost of an upsized water main and suggests at DD Level review that Lerner revise the highway layout to impact the existing water main, allowing Mabelvale to get a new water main and only pay the cost to upsize the pipe.

The Question:

- Was it ethical for Lerner to revise the design so that the old water main was impacted (in order to save Mabelvale a lot of money)?
- Was it ethical for FB to sign off on the design so that the old water main was impacted (in order to save Mabelvale a lot of money)?

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NSPE Ruling

Even though it was done “for a good cause” neither acted in an ethical manner. Engineers must remain **a faithful agent** of their employer, must **avoid deception**, and must protect the honor and reputation of the profession.

Case Study #2

The Facts:

- Emily owns an MPE firm. She signs a contract to provide MPE design services for a facility. She assigns the HVAC design to a recently hired P.E., Real Evant.
- During conversations with the architect and Owner, Evant learns the Owner desires the HVAC be a “traditional HVAC design using Code-required unit efficiencies and gas heat”.
- Evant refuses to perform the design due to poor sustainability/decarb, citing the NSPE Code of Ethics Professional Obligation: “Engineers are encouraged to adhere to the principles of sustainable development.”

The Question:

- Was it ethical for Emily to accept the project?
- Was it ethical for Evant to refuse the assignment?

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NSPE Ruling

Engineering work is not performed in a vacuum, and service to the public good is not without competing interests.

There were no building code restrictions that would prevent installation of the “traditional” system. Therefore, specific sustainability issues fall within the space of “client choice.”

Engineers must act as a faithful agent of their employer and client (mandatory) and are encouraged to adhere to sustainability principles.

It was ethical for Emily to accept the project. Likewise, it would have been ethical for Evant to design the system as assigned.

Evant’s dissent was not unethical but could have caused some career issues.



Case Study #3

The Facts:

- A consulting engineer completes work on a project for a client and is paid.
- Several months later, the engineer is contacted by authorities and is subpoenaed to appear to a federal grand jury regarding a criminal investigation of the client regarding the project's funding by a federal agency.
- The engineer provides requested contracts and documents but is not required to testify to the grand jury.

The Question:

- Did the engineer have an ethical obligation to participate in the investigation?
- Does the engineer have an ethical obligation to inform his client of the document submission?

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NSPE Ruling

Engineers do not have “protected privilege”..... **Engineers shall not reveal facts, data, information without prior consent** of the client except as authorized or required by law.

Failure to cooperate could expose the engineer to criminal charges.

This is clearer because this it is a “former client”. Also, the investigation concerns matters outside the relationship between the engineer and client.

Disclosure to the client could expose the engineer to prosecution.

Engineer should consult with legal counsel if this were a “current client”.

Case Study #4

The Facts:

- Emily, a consulting environmental engineer, has served 2 competing industrial clients for several years (with knowledge of both clients). She has been successful in maintaining confidentiality of each client's information.
- She knows of a deficiency of a stricter environmental rule (not yet being enforced) at a facility owned by Company A. Company A does not want to comply with the "future" rule.
- She learns that Company B wants to buy that facility.
- She knows the deficiency will eventually cost the buyer large money.

The Question:

- What are the engineer's obligations?

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NSPE Ruling

Emily has mutual ethical obligations to both clients.

The confidentiality regarding Company A's information will cause her to act inconsistently with Company B's interests.

Disclosure of the data to Company B will cause a breach of his obligation to Company A.

This servant cannot serve 2 masters – he must resign from one of the relationships.



Questions?

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Resources

Case #1: NSPE Board of Ethical Review, 2022 – APPROVED
3/22, Case No. 21-11

Case #2: NSPE Board of Ethical Review, 2024 – APPROVED
2/23, Case No. 22-10

Case #3: NSPE Board of Ethical Review; 2/21/13 – APPROVED;
Case No. 12-3

Case #4": NSPE Board of Ethical Review; 12/31/03 –
APPROVED; Case No. 03-3T