

Engineering Codes: Ethics or Law?

Continuing Ed workshop by Richard Skeirik, PE

Actionability Exercise

Fuller believed that according to Procedural Morality, laws must not require conduct beyond the power of the affected parties. In other words, the rules must be actionable.

Part 1:

In the DAPE Code of Ethics, consider 1.A and 1.B.

A. The engineer shall at all times recognize that his paramount duty is to safeguard life, health and property and to promote the public welfare. If his professional judgment is overruled under circumstances such that upon investigation he believes that the life, health and property or public welfare is endangered, he shall so inform his employer and the Council of the Delaware Association of Professional Engineers.

B. The engineer shall approve and seal only those design documents which in his considered opinion do not endanger the life, health, property and the public welfare in conformity with accepted engineering standards.

1.A depends on what the engineer believes in his professional judgment; while 1.B depends on the engineer's considered opinion. We can consider these both referring to the engineer's judgment.

Looking at these two requirements in their totality, one rule has a single element that makes it much more actionable than the other. What is it? Where would an engineer seek this?

Part 2:

2.A. says, "The engineer shall undertake to perform engineering only when qualified by education or experience in the areas of professional engineering involved."

(a) What is the standard by which an engineer can judge his/her qualification for specific work? How can an engineer be sure to satisfy this requirement?

(b) The DAPE Guidelines for Maintaining Continuing Professional Competency seek to maintain "a high standard of integrity, skills, and practice in the profession of engineering." In your personal experience, has CE/CPC training maintained/improved your qualification to undertake engineering? Does compliance with CPC make any difference in your assessment of your qualification for specific work (of any kind)?

(c) The Principles and Practice of Engineering examination (in Chem E) covers most of the science and design topics that fall within chemical engineering. In your judgment, does recent passing of the PPE exam make any difference in assessing an engineer's qualification for specific work? Is it adequate to satisfy 2.A.?

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(d) Engineers from time to time move into areas of engineering that are new to them. What does 2.A mean for a PE moving into a new area to develop new skills and expertise?

(e) Can you devise a standard or basis that could be applied in your area of engineering practice?

(f) The maximum penalty for violating the Code of Ethics, including this requirement, includes revocation of licensure. Considering this, is 2.A an actionable law? Can it be viewed as an Aristotlian virtue statement?

(g) 2.A could be considered as a decision between two actions: to undertake the work; or to decline the work. Can you devise a pluralistic utilitarian analysis that would help resolve this choice? If you can, does the choice you make satisfy 2.A?