Code Enforcement -- NSPE Case No. 98-5

Year

1998

Description

An engineer is in the position of having to trade one safety concern for another.

Body

Facts

Engineer A serves as a director of a building department in a major city. Engineer A has been concerned that as a result of a series of budget cutbacks and more rigid code enforcement requirements, the city has been unable to provide a sufficient number of qualified individuals to perform adequate and timely building inspections. Each code official member of Engineer A's staff is often required to make as many as 60 code inspections per day. Engineer A believes that there is no way even the most conscientious code official can make 60 adequate, much less thorough, inspections in one day, particularly under the newer, more rigid code requirements for the city. These new code requirements greatly enhance and protect the public's health and safety. The code officials are caught between the responsibility to be thorough in their inspections and the city's desire to hold down costs and generate revenue from inspection fees. Engineer A is required to sign off on all final inspection reports.

Engineer A meets with the chairman of the local city council to discuss his concerns. The chairman indicates that he is quite sympathetic to Engineer A's concerns and would be willing to issue an order to permit the hiring of additional code officials for the building department. At the same time, the chairman notes that the city is seeking to encourage more businesses to relocate into the city in order to provide more jobs and a strengthened tax base. In this connection, the chairman seeks Engineer A's concurrence on a city ordinance that would permit certain specified buildings under construction to be "grandfathered" under the older existing enforcement requirements and not the newer, more rigid requirements now in effect. Engineer A agrees to concur with the chairman's proposal, and the chairman issues the order to permit the hiring of additional code officials for the building department, which Engineer A believes the city desperately needs.

Question

- Was it ethical for Engineer A to agree to concur with the chairman's proposal under the facts?

References

- *Code of Ethics* - Section I.1. - "Engineers, in the fulfillment of their professional duties, shall hold paramount the safety, health and welfare of the public."
- Section II.1.b. - "Engineers shall approve only those engineering documents which are in conformity with applicable standards."
- Section II.3.b. - "Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter."
- Section III.1.b. - "Engineers shall advise their clients or employers when they believe a project will not be successful."

Discussion

The duty to hold paramount the public health, safety, and welfare is among the most basic and fundamental obligations to which an engineer is required to adhere. While in many instances, the obligation is often clear and obvious, in other instances, there could be an obligation on the part of the engineer to balance competing or concurrent obligations or responsibilities to protect the public health and safety. The facts of this case are in many ways a classic ethical dilemma faced by many engineers in their professional lives. Engineers have a fundamental obligation to hold paramount the safety, health, and welfare of the public in the performance of their professional duties (See Code Section I.1.). Moreover, the Code provides guidance to engineers who are confronted with circumstances where their professional reputations are at stake. Sometimes engineers are asked by employers or clients to sign off on documents about which they may have reservations or concerns (See Code Section II.1.b.).

The Board has addressed public health and safety issues in the code and approval process on numerous occasions. In BER Case 92-4, Engineer A, an environmental engineer employed by the state environmental protection division, was ordered to draw up a construction permit for construction of a power plant at a manufacturing facility. He was told by a superior to move expeditiously on the permit and "avoid any hang-ups" with respect to technical issues. Engineer A believed the plans as drafted were inadequate to meet the regulation requirements and that outside scrubbers to reduce sulfur dioxide emissions were necessary and without them the issuance of the permit would violate certain air pollution standards as mandated under the 1990 Clean Air Act. His superior believed that the plans, which involved

limestone mixed with coal in a fluidized boiler process that would remove 90% of the sulfur dioxide, will meet the regulatory requirements. Engineer A contacted the state engineering licensure board and was informed, based upon the limited information provided to the board, that suspension or revocation of his engineering license was a possibility if he prepared a permit that violated environmental regulations. Engineer A refused to issue the permit and submitted his findings to his superior. The department authorized the issuance of the permit. The Board concluded that (a) it would not have been ethical for Engineer A to withdraw from further work in this case, (b) it would not have been ethical for Engineer A to issue the permit and (c) it would be ethical for Engineer A to refuse to issue the permit. Specifically, the Board determined that it would not have been ethical for Engineer A to withdraw from further work on the project, because Engineer A had an obligation to stand by his position consistent with his obligation to protect the public, health, safety, and welfare and refuse to issue the permit. Said the Board, "Engineers have an essential role as technically-qualified professionals to 'stick to their guns' and represent the public interest under the circumstances where they believe the public health and safety is at stake."

As early as BER Case 65-12, the Board dealt with a situation in which a group of engineers believed that a product was unsafe. The Board then determined that as long as the engineers held to that view, they were ethically justified in refusing to participate in the processing or production of the product in question. The Board recognized that such action by the engineers would likely lead to loss of employment.

In BER Case 82-5, where an engineer employed by a large defense industry firm documented and reported to his employer excessive costs and time delays by sub-contractors, the Board ruled that the engineer did not have an ethical obligation to continue his efforts to secure a change in the policy after his employer rejected his reports, or to report his concerns to proper authority, but has an ethical right to do so as a matter of personal conscience. The Board noted that the case did not involve a danger to the public health or safety, but related to a claim of unsatisfactory plans and the unjustified expenditure of public funds. The Board indicated that it could dismiss the case on the narrow ground that the Code does not apply to a claim not involving public health and safety, but that was too narrow a reading of the ethical duties of engineers engaged in such activities. The Board also stated that if an engineer feels strongly that an employer's course of conduct is

improper when related to public concerns, and if the engineer feels compelled to blow the whistle to expose facts as he sees them, he may well have to pay the price of loss of employment. In this type of situation, the Board felt that the ethical duty or right of the engineer becomes a matter of personal conscience, but the Board was unwilling to make a blanket statement that there is an ethical duty in these kinds of situations for the engineer to continue the campaign within the company and make the issue one for public discussion.

More recently, in BER Case 88-6, an engineer was employed as the city engineer/director of public works with responsibility for disposal plants and beds and reported to a city administrator. After (1) noticing problems with overflow capacity, which are required to be reported to the state water pollution control authorities, (2) discussing the problem privately with members of the city council, (3) being warned by the city administrator to report the problem only to him, (4) discussing the problem again informally with the city council, and (5) being relieved by the city administrator of responsibility for the disposal plants and beds, the engineer continued to work in the capacity as city engineer/director of public works. In ruling that the engineer failed to fulfill her ethical obligations by informing the city administrator and certain members of the city council of her concern, the Board found that the engineer was aware of a pattern of ongoing disregard for the law by her immediate supervisor, as well as by members of the city council. After several attempts to modify the views of her superiors, the engineer knew, or should have known, that "proper authorities" were not the city officials, but more probably, state officials. The Board could not find it credible that a city engineer/director of public works for a medium-sized town would not be aware of this basic obligation. The Board said that the engineer's inaction permitted a serious violation of the law to continue and made the engineer an "accessory" to the actions of the city administrator and others.

Turning to the facts of the present case, Engineer A is faced with a predicament with a variety of options and alternatives. First, Engineer A could interpret the situation presented as one involving "trade-offs," in which Engineer A must weigh one "public good" (a better building inspection process) against a competing or concurrent "public good" (a consistent code enforcement process). In such a situation, Engineer A could arguably rationalize a decision to permit the inconsistent application of a building code in order to accomplish the larger objective of obtaining the necessary resources to hire a sufficient number of code enforcement

officials to provide proper protection to the public health and safety. On the other hand, Engineer A's decision to permit developers to avoid compliance with the newer, updated building code enforcement requirements might potentially cause a real danger to the public health and safety if the a new facility causes harm to the public because of its failure to comply with the more updated code requirements. In addition, agreeing to the chairman's arrangement has the appearance of compromising the public health and safety for political gain.

While this case presents a difficult dilemma for Engineer A, on balance, the Board believes that previous BER cases provide sufficient guidance for Engineer A. Each of the earlier cases discussed present a constant theme that the engineer must hold the public health and safety paramount and that the engineer has an responsibility to insist, however strongly and vociferously, that public officials and decision-makers take steps and corrective steps if necessary to see that this obligation is fulfilled. The Code of Ethics makes it clear that engineers have an obligation to advise their clients or employers when they believe a project will not be successful. In this case, Engineer A should make it plain and clear to the chairman that "righting a wrong with another wrong," does grave damage to the public health and safety (See Code Section III.1.b.). Engineer A should insist that the public will be seriously damaged in either case and that if the integrity of the building code enforcement process is undermined for short-term gain, the city, its citizens, and its businesses will be harmed in the long term.

Conclusion

It was not ethical for Engineer A to agree to concur with the chairman's proposal under the facts. Additionally, it was not ethical for Engineer A to sign inadequate inspection reports. (See Code Section II.1.b.).

Board of Ethical Review:

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NSPE Code of Ethics An earlier version may have been used in this case.

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For a version of this case adapted for classroom use, see: Code Enforcement (adapted from NSPE Case No. 98-5).

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