



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Public Criticism of Bridge Safety -- NSPE Case No. 88-7

Year

1988

Description

A case in which an engineer agrees to take a job for the local newspaper, which misrepresents the engineer's professional opinion.

Body

Facts

Engineer A, a renowned structural engineer, is hired for a nominal sum by a large city newspaper to visit the site of a state bridge construction project, which has had a troubled history of construction delays, cost increases, and litigation primarily as a result of several well publicized, on-site accidents. Recently the state highway department has announced the date for the opening of the bridge. State engineers have been proceeding with repairs based upon a specific schedule.

Engineer A visits the bridge and performs a one-day visual observation. Her report identifies, in very general terms, potential problems and proposes additional testing and other possible engineering solutions. Thereafter, in a series of feature articles based upon information gleaned from Engineer A's report, the newspaper alleges that the bridge has major safety problems that jeopardize its successful completion

date. Allegations of misconduct and incompetence are made against the project engineers and the contractors as well as the state highway department. During an investigation by the state, Engineer A states that her report was intended merely to identify what she viewed were potential problems with the safety of the bridge and was not intended to be conclusive as to the safety of the bridge.

Question

- Was it ethical for Engineer A to agree to perform an investigation for the newspaper in the manner stated?

References

- *Code of Ethics* - Section II.3.a. - "Engineers shall be objective and truthful in professional reports, statements or testimony. They shall include all relevant and pertinent information in such reports, statements or testimony."
- Section II.3.b. - "Engineers may express publicly a professional opinion on technical subjects only when that opinion is founded upon adequate knowledge of the facts and competence in the subject matter."
- Section II.3.c. - "Engineers shall issue no statements, criticisms or arguments on technical matters which are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the engineers may have in the matters."
- Section III.2.a. - "Engineers shall seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community."
- Section III.3.a. - "Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep statements from being misleading or intended or likely to create an unjustified expectation; statements containing prediction of future success; statements containing an opinion as to the quality of the Engineers' services; or statements intended or likely to attract client by the use of showmanship, puffery, or self-laudation, including the use of slogans, jingles, or sensational

language or format."

Discussion

The technical expertise that engineers can offer in the discussion of public issues is vital to the interests of the public. We have long encouraged engineers to become active and involved in matters concerning the well-being of the public. Moreover, the NSPE Code of Ethics makes clear that engineers should "seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community." (Section III.2.a.)

Obviously, this important involvement must be appropriate to the circumstance of the situation. In situations where an engineer is being asked to provide technical expertise to the public discussion, the engineer should offer objective, truthful, and dispassionate professional advice that is pertinent and relevant to the points at issue. The engineer should only render a professional opinion publicly, when that opinion is (1) based upon adequate knowledge of the facts and circumstance involved, and (2) the engineer clearly possesses the expertise to render such an opinion.

The Board has earlier visited situations in which engineers have publicly rendered professional opinions. In Case 65-9, a consulting engineer who had performed the engineering work on a portion of an interstate highway to which a proposed controversial highway by-pass would connect, issued a public letter which was published in the local press, criticizing the cost estimates of the engineers of the state highway department, stating alleged disadvantages of the proposed route, and pointing out an alternative route. The newspaper story contained the full text of the letter from the consulting engineer.

In deciding that it was ethical for the engineer to publicly express criticism of the proposed highway routes prepared by engineers of the state highway department, the Board stated: ". . . the whole purpose of engineering is to serve the public interest. When an engineering project has such a direct and substantial impact on the daily life of the citizenry as the location of a highway it is desirable that there be public discussion. The Code does not preclude engineers, as citizens, from participating in such public discussion. Those engineers who have a particular qualification in the field of engineering involved may be said to even have a

responsibility to present public comment and suggestions in line with the philosophy expressed in the Code."

Thereafter, in Case 79-2, the Board ruled that where an engineer had significant environmental concerns, it was not unethical for the engineer to criticize a town engineer and a consulting engineer with respect to findings contained in a report on a sanitary landfill for the town. Said the Board: "It is axiomatic that an engineer's primary ethical responsibility is to follow the mandate of the Code to place the public welfare over all other considerations."

We noted that these issues in the public arena are subject to open public debate and resolution by appropriate public authority. Here the engineer was acting within the intent of the Code in raising his concern. We concluded by citing earlier decision Case 63-6 in which we noted: "There may also be honest differences of opinion among equally qualified engineers on the interpretation of the known physical facts . . . The Code does not prohibit . . . public criticism; it only requires that the engineer apply due restraint. . . in offering public criticism of the work of another engineer; the engineering witness will avoid personalities and abuse, and will base his criticism on the engineering conclusions or application of engineering data by offering alternative conclusions or analyses." It is clear, based upon the Code of Ethics and several interpretations of the Code by this Board that the engineer may and, indeed in some cases, must ethically provide technical judgment on a matter of public importance with the aforementioned considerations concerning expertise, adequacy of knowledge, and the avoidance of personality conflicts in mind.

However, we must note that under the facts of this case, we are not merely dealing with a disinterested engineer who on her own has decided to come forward and offer her professional views. Rather, we are dealing with an engineer who was retained by a newspaper to provide her professional opinion with the understanding that the opinion could serve as the basis for news articles concerning the safety of the bridge. This fact gives an added ethical dimension to the case and requires our additional analysis. In this regard, it is our view that as a condition of her retention by the newspaper involved, Engineer A has an ethical obligation to require that the newspaper clearly state in the articles that Engineer A had been retained for a fee by the newspaper in question to perform the one-day observation of the bridge site.

We should also add that in circumstances such as here where an engineer is being retained by a newspaper to offer a professional opinion concerning a matter of

public concern, the engineer must act with particular care, should exercise the utmost integrity and dignity, and should take whatever reasonable steps are necessary to enhance the probability that the engineer's professional opinions are reported completely, accurately, and not out of context. While we recognize that there are limits to what an engineer can do in these areas, we believe that the engineer has an obligation to the public as well as to the profession to protect the integrity of her professional opinions and the manner in which those opinions are disseminated to the public.

Conclusion

It was not unethical for Engineer A to agree to perform an investigation for the newspaper in the manner stated but Engineer A has an obligation to require the newspaper to state in the article that Engineer A had been retained for a fee by the newspaper to provide her professional opinion concerning the safety of the bridge.

Board of Ethical Review:

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[NSPE Code of Ethics](#) An earlier version may have been used in this case.

Notes

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For a version of this case adapted for classroom use, see: [Public Criticism of Safety \(adapted from NSPE Case No. 88-7\)](#).

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