Public Welfare – Client Action Following Engineer's Services

Case No. 04-8

Facts:

Engineer A is an environmental engineer. Engineer A performs wetland delineation services on the client's wetland site. A few months after Engineer A completes the services, he drives by his client's property and notices that the client has installed a substantial amount of fill material on more than ½ an acre across a portion of the wetlands without any permits, variances, or permissions. The installation of the fill material is a substantial violation of the federal and state laws and regulations.

Question:

What are Engineer A's ethical obligations under these facts?

References:

Section I.1.	-	*NSPE Code of Ethics:*	*Engineers, in the fulfillment of their professional duties, shall hold paramount the safety, health and welfare of the public.*
Section II.1.a.	-	*NSPE Code of Ethics:*	*If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.*
Section II.1.c.	-	*NSPE Code of Ethics:*	*Engineers shall not reveal facts, data or information without the prior consent of the client or employer except as authorized or required by law or this Code.*
Section II.1.f.	-	*NSPE Code of Ethics:*	*Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.*
Section II.4.	-	*NSPE Code of Ethics:*	*Engineers shall act for each employer or client as faithful agents or trustees.*
Section III.1.	-	*NSPE Code of Ethics:*	*Engineers shall be guided in all their relations by the highest standards of honesty and integrity.*
Section III.4.	-	*NSPE Code of Ethics:*	*Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve.*

Discussion:

The facts in this case present a situation that often raises very difficult issues for engineers in their dealings with clients. Engineering practice sometimes places the engineer in the position where the interests of a client and the interests of the public are in open and serious conflict.

Although the NSPE Board of Ethical Review has had occasion to address similar issues in the past, it has not addressed the issue in the context of a client's apparent violation of environmental laws and regulations relating to wetland mitigation efforts.

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Engineers play an essential role in society by taking steps and actions to see that products, systems, facilities, structures, and the land surrounding them are reasonably safe. Sometimes engineers are placed in situations where they must balance the extent of their obligations to their employer or client with their obligations to protect the public health and safety.

An example of the basic ethical dichotomy presented in this case was considered by the BER in Case No. 89-7. In that case, Engineer A was retained to investigate the structural integrity of a 60-year-old occupied apartment building which his client was planning to sell. Under the terms of the agreement with the client, the structural report written by Engineer A was to remain confidential. In addition, the client made clear to Engineer A that the building was being sold "as is" and that the client was not planning to take any remedial action to repair or renovate any system within the building prior to its sale. Engineer A performed several structural tests on the building and determined that the building was structurally sound. However, during the course of providing services, the client confided in Engineer A and informed him that the building contained deficiencies in the electrical and mechanical systems, which violated applicable codes and standards. While Engineer A is not an electrical or mechanical engineer, he realized that those deficiencies could cause injury to the occupants of the building and so informed the client. Specifically, in his report, Engineer A made a brief mention of his conversation with the client concerning the deficiencies. However, in view of the terms of the agreement, Engineer A did not report the safety violations to any third party.

In deciding it was unethical for Engineer A not to report the safety violations to the appropriate public authorities, the Board noted that the facts presented in the case raised a conflict between two basic ethical obligations of an engineer: The obligation of the engineer to be faithful to the client and not to disclose confidential information concerning the business affairs of a client without that client's consent, and the obligation of the engineer to hold paramount the public health and safety.

As noted in BER Case No. 89-7, there are various rationales for the nondisclosure language contained in the NSPE Code of Ethics. Engineers, in the performance of their professional services, act as "agents" or "trustees" to their clients. They are privy to a great deal of information and background concerning the business affairs of their client. The disclosure of confidential information could be quite detrimental to the interests of their client and, therefore, engineers as "agents" or "trustees" are expected to maintain the confidential nature of the information revealed to them in the course of rendering their professional services.

In BER Case No. 97-13, another more recent case that raised similar issues, a public agency retained the services of VWX Architects and Engineers to perform a major scheduled overhaul of a bridge. VWX Architects and Engineers retained the services of Engineer A, a civil engineer, as its sub-consultant to perform bridge inspection services

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on the bridge. Engineer A's scope of work was solely to identify any pavement damage on the bridge and report the damage to VWX for further review and repair. Three months prior to the beginning of the scheduled overhaul of the bridge, while traveling across the bridge, Police Officer B lost control of his patrol car. The vehicle crashed into the bridge wall. The wall failed to restrain the vehicle, which fell to the river below, killing Police Officer B. While conducting the bridge inspection, and although not part of the scope of services for which he was retained, Engineer A noticed an apparent pre-existing defective condition in the wall close to where the accident involving Police Officer B occurred. Engineer A surmised that the defective condition may have been a contributing factor in the wall failure and noted this in his engineering notes. Engineer A verbally reported this information to his client, who then verbally reported the information to the public agency. The public agency contacted VWX Architects and Engineers which then contacted Engineer A and asked Engineer A not to include this additional information in his final report since it was not part of his scope of work. Engineer A stated that he would retain the information from his engineering notes but not include it in the final report, as requested. Engineer A did not report this information to any other public agency or authority.

In deciding that (1) it was ethical for Engineer A to retain the information in his engineering notes but not include it in the final written report as requested, and (2) it was ethical for Engineer A not to report this information to any other public agency or authority as long as corrective action was taken by the public agency within a relatively short period of time, the Board noted that Engineer A acted reasonably under the circumstances by properly balancing the obligation of the engineer to be faithful to the client and not to disclose what might be considered by the client to be confidential information concerning the business affairs of a client without that client's consent, and the obligation of the engineer to hold paramount the public health and safety.

The Board said this because there was nothing under the facts to indicate anything more than Engineer A's general surmise and speculation about the cause of the structural failure of the wall. Engineer A's observation appeared to be based upon a visual inspection without anything more, the facts did not indicate that Engineer A had expertise in structural engineering. While it might have been appropriate for Engineer A to note such information in his field notes, to place this information in a final report would not be responsible and could unnecessarily inflame the situation. However, under no circumstance would it be appropriate for Engineer A to alter his field notes.

Also, while it might be appropriate for Engineer A to verbally report this information to Engineer A's client, and for the client to report this information to the public agency, it is clear that Engineer A was retained to perform a specific task for which he was presumably competent. Clearly the prime consultant, which has overall responsibility for the project, was in a far better position than Engineer A to understand the interrelationships between various elements of the projects, including the history of

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previous work performed on the bridge, prior consultants, contractors, etc., in order to make an informed evaluation.

Therefore, the Board concluded that Engineer A did the appropriate thing in coming forward to his client with the information and also by documenting the information for possible future reference as appropriate. Under the circumstances, the Board concluded that it would have been improper for Engineer A to include reference to the information in his final report, particularly since it would have been based upon mere speculation and not careful testing or evaluation by a competent individual or firm. At the same time, the Board was of the opinion that Engineer A had an obligation to follow through to see that correct follow-up action was taken by the public agency. Finally, the Board concluded that for Engineer A to have reported this information to a public authority under the circumstances as outlined in the facts, before determining whether corrective action is taken, would have been an overreaction and could easily have risked jeopardizing the professional reputations of his client and the public agency.

Turning to the facts in the present case, the Board can easily distinguish BER Case Nos. 89-7 and 97-13 from the present case. Those two cases involved a different set of factors that created a reasonable basis for an engineer to take a more measured approach to the situation. In BER Case No. 89-7, for example, the facts revealed that the client had confided in the engineer and may have relied upon the engineer to maintain the information in confidence. In addition, the engineer in BER Case No. 89-7 did not have any particular expertise in the technical areas (mechanical, electrical) involved in the matter at issue. Taken together, it would be reasonable for an engineer under those circumstances to act in a deliberate and cautious manner before taking any action. Similarly, in BER Case No. 97-13, the engineer's evaluation was based upon general surmise and speculation about the cause of the structural failure of the wall, based entirely upon a visual inspection without anything more. In addition, as in BER Case No. 89-7, there was nothing noted in the facts to indicate that Engineer A had expertise in the specific discipline involved—structural engineering. Again, BER Case No. 97-13 indicates some basis for the engineer to be more reflective and careful before making statements or taking actions that could jeopardize the interests of others.

In contrast, the facts in the present case indicate a violation of the federal and state laws and regulations. Engineer A's actions appear to be obvious—contact the client and inquire directly about the actions the client has taken and point out the violations of the law and that immediate steps need to be taken to remedy the violation. If the client indicates that those steps will be taken, the engineer should monitor the situation until the engineer is sufficiently satisfied that the situation has been remedied. In this connection, the engineer should advise that the all remedial actions should be in full compliance with all applicable environmental laws and regulations, which may include the review of a licensed engineer. If appropriate steps are not taken by the client, the engineer would have an obligation to bring this matter to the attention of the appropriate authorities.

Conclusion:

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Engineer A should contact the client and inquire about the actions the client has taken and point out the action is a violation of the law and that steps need to be take to remedy the violation or obtain a variance from the proper authorities. In this connection, the engineer should advise that the remedial actions should be in full compliance with all applicable environmental laws and regulations, which may include the review of a licensed engineer. If appropriate steps are not taken by the client, Engineer A has an obligation to bring this matter to the attention of the appropriate authorities.

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Each opinion is intended as guidance to individual practicing engineers, students and the public. In regard to the question of application of the NSPE Code to engineering organizations (e.g., corporations, partnerships, sole-proprietorships, government agencies, university engineering departments, etc.), the specific business form or type should not negate nor detract from the conformance of individuals to the NSPE Code. The NSPE Code deals with professional services—which must be performed by real persons. Real persons in turn establish and implement policies within business structures.

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NSPE BER CASE NO. 04-8
DISSENTING OPINION

Discussion:

We respectfully disagree with the conclusion of the majority of the Board. We believe that the Board majority was swayed by the perception that a "serious violation of environmental laws" is without question a threat to the public health, safety, and welfare. We disagree with this premise, and we think prior Board decisions distinguish between endangerment of the public welfare and violation of public policy. While any disregard of the rule of law is counter to public policy, it is primarily an economic and political issue not explicitly addressed in the NSPE Code of Ethics.

On many occasions the Board has considered circumstances where an Engineer's ethical obligation to protect the health, safety, and welfare of the public conflicts with his obligations to treat information he gains about the business affairs of his client as confidential. As in BER Case No. 89-7, it has been consistently concluded that where there may be a physical endangerment of the public the engineer's ethical obligation to inform appropriate authorities of the danger transcends his obligations to his client for privacy of the client's affairs. The conclusion of BER Case No. 97-13, which condones not reporting a possible danger to all appropriate authorities, is so qualified as to provide limited guidance for the facts in this instance and it again dealt with a potential physical hazard to the public. BER Case No. 82-5 was not referenced in the majority discussion and we believe it is perhaps the most relevant to the present case. BER Case No. 82-5 deals with an engineer's objection to deficiencies in a sub-contractor's work that he believes will cause excessive cost and time delays in government defense projects. The engineer's management superiors refuse to take action and threaten to terminate the engineer. The Board concluded that the engineer does not have an ethical obligation to continue his effort to secure a change in the policy of his employer under these circumstances, or to report his concerns to proper authority, but has an ethical right to do so as a matter of personal conscience. In the discussion the Board said the following: "In this type of situation, we feel that the ethical duty or right of the engineer becomes a matter of personal conscience, but we are not willing to make a blanket statement that there is an ethical duty in these kinds of situations for the engineer to continue his campaign within the company, and make the issue one for public discussion. The NSPE Code only requires that the engineer withdraw from a project and report to proper authorities when the circumstances involve endangerment of the public health, safety, and welfare."

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The facts in the present case indicate a clear violation of the federal and state laws and regulations. There is also a clear conflict between the engineer's obligations to the public health and safety, which our code says are "paramount", and the engineer's obligations to his client. It would be dysfunctional to hold that any violation of law or regulations by the client is by definition a threat to the public health and safety, requiring the engineer to "blow the whistle" on his client. There is no section in the NSPE Code that obligates an engineer to report to authorities all law violations of which he becomes aware. In fact, NSPE Code Section II.1.c states quite the opposite. As in many other areas of engineering practice, this situation requires the application of good judgment. What harm to the public is threatened by the client's action, and how imminent is the problem? Contemporary values in 2004 place much higher value on environmental issues, but how harmful is the filling of a fraction of an acre of wetlands? The problem is understood to be cumulative, resulting from the filling of millions of acres of wetlands over the past several centuries, leading to a national goal and policy to prevent further cumulative loss. The goal is to preserve the filtering benefit of wetlands on the basin wide accumulation of pollutants in the receiving body of water. The effects of a single small project, by itself, cannot be very substantial, and is most likely imperceptible and undetectable by any measurement technique. In this case, good judgment calls for the engineer to place priority on his client's trust, because there is no imminent threat to the public health and safety. Engineer A's actions appear to be obvious—contact the client and inquire directly about the actions the client has taken and point out the violations of the law and that immediate steps should be taken to remedy the violation. If the client does not take appropriate steps, then Engineer A should withdraw from any further service to the client. He has no further ethical obligation to monitor the situation or to take it any farther, in the absence of endangerment to the public health, safety, and welfare. Only if Engineer A believes there is a threat to the public health and safety is he ethically bound to forego his commitment to keep confidential the business affairs of his client and inform appropriate authorities.

Conclusion:

Engineer A should contact the client and inquire directly about the actions the client has taken, point out the violations of the law, and advise that immediate steps should be taken to remedy the violation. If the client does not take appropriate steps, Engineer A should withdraw from any further service to the client; however, he has no further ethical obligation, unless he believes that the public health and safety may be endangered. Should Engineer A believe the violation of the law could endanger the public health and safety, he is ethically obligated to inform appropriate authorities if the condition is not remedied.

BOARD OF ETHICAL REVIEW
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Concurring in Part with the Minority Opinion:

During the NSPE Board of Ethical Review's deliberations, Case 04-8 was discussed at great length with the final vote being to support the majority opinion. . Two dissenting members voted against this conclusion and were asked to write a dissenting opinion. These two members developed an opinion that differed from the opinion the majority favored.

As the NSPE Board of Ethical Review Chairman, I agree with the majority opinion but I also support the inclusion of the dissenting opinion, primarily because it illustrates the point that ethical issues are frequently not clear cut. . This Case provides an excellent basis for discussing the "fine print" of the NSPE Code of Ethics and how the "fine print" may or may not be applied in a particular case.

Under the facts, there seems to be no doubt the land owner violated the "law". . The dissenting opinion, however, properly focused on how far any engineer may be ethically compelled to report violations of the law that may or may not reach a threshold that endangers the public health and safety.

E. D. Dorchester, P.E., F.NSPE
BER Chairman

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