BER Case 91-8

APPROVED BY BER
November 1, 1991

Section II.2. - Code of Ethics
Section II.2.b. - Code of Ethics
Section II.2.c. - Code of Ethics

CERTIFICATION OF WORK PERFORMED BY TECHNICIAN

FACTS:

Engineer A's firm is retained by a major fuel company to perform site investigations in connection with certain requirements under state and federal environmental regulations. Under the procedures established by Engineer A's firm, the site visits will be conducted by engineering technicians under direct supervision of Engineer A who will perform all observations, sampling, and preliminary report preparation. Engineering technicians will also take photographs of the sites. No professional engineers will be present during the site visits. Following site visits, all pertinent information and material will be presented to Engineer A who is competent in this field. Following a careful review, Engineer A will certify that the evaluations were conducted in accordance with engineering principles.

QUESTION:

Is it ethical for Engineer A to certify that the evaluations were conducted in accordance with engineering principles?

REFERENCES:

Section II.2. -Engineers shall perform services only in the areas of their competence.

Section II.2.b. -Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.

Section II.2.c. -Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.

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DISCUSSION:

The NSPE Code of Ethics is very clear concerning the requirements of an engineer to perform services only in the engineer's area of competence (Section II.2.). Applicable provision indicate that engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control (Section II.2.b.), and may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment (Section II.2.c.).

The Board has had numerous opportunities too interpret these provisions of the Code of Ethics. Two recent BER opinions have squarely addressed these provisions. In BER Case 86-2 an engineer was the chief engineer within a large engineering firm, and affixed his seal to some of the plans prepared by registered engineers working under his general direction who did not affix their seals to the plans. At times, the engineer also sealed plans prepared by non-registered graduate engineers working under his general supervision. Because of the size of the organization and the large number of projects being designated at any one time, the engineer found it impossible to give a detailed review or check of the design. He believed he was ethically and legally correct in not doing so because of his confidence in the ability of those he had hired and who are working under his general direction and supervision. By general direction and supervision, the engineer meant that he was involved in helping to establish the concept, the design requirements, and review elements of the design or project status as the design progressed. The engineer was consulted about technical questions and he provided answers and direction in these matters. In evaluation the facts and circumstances in this case, the Board focused on the language in the Section II.2.b. relating to obligation of Engineers to not affix their signature to documents or plans...not prepared under their "direction and control." Following a careful review of the plain meaning of the terms "direction" and "control", the Board concluded that the terms have meaning which, when combined, would suggest that an engineer "would be required to perform all tasks related to the preparation of the drawings, plans, and specifications in order for the engineer to ethically affix his seal. The Board also noted at the time that the NCEES Model Law would require that an engineer must be in "responsible charge" -- meaning "direct control and personal supervision of engineering work" -- in order to affix his seal.

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Later, in BER Case 90-6, the Board considered two separate fact situations involving the signing and sealing of documents by an engineer prepared using a CADD system. In considering the facts the Board noted that the rendering of the Board's decision in BER Case 86-2 raised a considerable degree of discussion within the engineering community because to many it appeared to be inconsistent with customary and general prevailing practices within the engineering profession and would therefore place a significant number of practitioners in conflict with the provisions of the Code. The Board noted at the time that the Code of Ethics is not a static document and must reflect and be in consonance with general prevailing practices within the engineering profession. Said the Board, "the Code must not impose an impossible or idealistic standard upon engineers, but rather must establish a benchmark of reasonable and rational methods of practice for it to maintain its credibility and adherence." The Board determined that the conclusion in BER Case 86-2 should be modified to reflect actual practices which exist within engineering and not impose an impossible standard upon practice. Said the Board, "Were the Board to decide BER Case 86-2 today, the Board would conclude that it was not unethical for the engineer in that instance to seal plans that were not personally prepared by him as long as those plans were checked and reviewed by the engineer in some detail. The Board does not believe this represents a reversal of the Board's decision in BER Case 86-2, but rather a clarification, particularly for those who were troubled by the Board's discussion and conclusion in that case.

We follow the reasoning in BER Case 90-6 and its clarification of BER Case 86-2. Under the facts in the instant case, we believe it was appropriate for Engineer A to certify that the environmental certifications were performed in accordance with engineering principles. Customary engineering practice includes the use of engineering technicians, technologists, graduate engineers and others to prepare preliminary reports, studies, evaluations, etc., with a professional engineer performing a careful review of all pertinent material and then signing and sealing appropriate plans and drawings. Such practices are intended to utilize the talents of those individuals with the most pertinent education, training and experience appropriate for the task at hand and represent basic standards of engineering principles and practice.

We are of the view that so long as the professional engineer exercising direction and control performs a careful and detailed review of the material submitted by the engineer's staff, there has been full compliance with Section II.2.c.

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CONCLUSION:

It was ethical for Engineer A to certify that the evaluations were conducted in accordance with engineering principles.

BOARD OF ETHICAL REVIEW

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