REFERE	NCES:
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II.2.b	Code of Ethics:	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.

II.2.c. - Code of Ethics: Engineers may accept assignments and assume responsibility for coordina-

tion 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.

II.4.d. - Code of Ethics: Engineers in public service as members, advisors or employees of a

governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them

or their organizations in private or public engineering practice.

II.4.e. - Code of Ethics: Engineers shall not solicit or accept a contract from a governmental body on

which a principal or officer of their organization serves as a member.

II.5.a. - Code of Ethics: Engineers shall not falsify their qualifications or permit misrepresentation of

their, or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers,

employees, associates, joint venturers or past accomplishments.

III.1.c. - Code of Ethics: Engineers shall not accept outside employment to the detriment of their

regular work or interest. Before accepting any outside engineering

employment, they will notify their employers.

III.6.a. - Code of Ethics: Engineers shall not request, propose, or accept a commission on a

contingent basis under circumstances in which their judgment may be

compromised.

III.6.b. - Code of Ethics: Engineers in salaried positions shall accept part-time engineering work only

to the extent consistent with policies of the employer and in accordance with

ethical considerations.

RESPONSIBLE CHARGE -- WORKING PART-TIME FOR FIRM

FACTS:

Engineer A is a licensed professional engineer and land surveyor in state A. Engineer A is associated with a firm, XYZ Engineering and Surveying (which offers professional engineering and surveying), as the licensed professional engineer in charge under the state's certificate of authorization requirement. The firm has not performed any work outside of state A. Engineer A's understanding of the law of state A is that a licensed professional engineer is to be in "responsible charge" of engineering and a person licensed as a professional land surveyor is to be in "responsible charge" of land surveying. These persons in responsible charge can be a principal of the firm or an employee of the firm under the state's laws.

The agreement Engineer A has with XYZ Engineering and Surveying is that XYZ grants Engineer A 10% share of the stock in the firm and as compensation for his engineering services, Engineer A will receive 5% of the gross billings for engineering work for which the seal of a licensed engineer in responsible charge of engineering is required. This agreement is contingent on the understanding that if any one of the three principals of XYZ Engineering and Surveying becomes licensed as a professional engineer in state A, the agreement will become void and the 10% stock will be returned to XYZ Engineering and Surveying.

In addition to working with XYZ Engineering and Surveying, Engineer A has a full-time engineering position for a state governmental agency. This work requires no engineering license. Engineer A works thirty-five hours per week on a flex-time basis and provides about twenty hours per week supervising engineering services at the firm, plus an additional twelve hours of work on the weekends. Engineer A does not normally go into the field for XYZ Engineering and Surveying but is available for consultation, twenty-four hours a day.

Both the state governmental agency and the engineering firm are aware of Engineer A's activities as a dual employee and do not object to these activities.

QUESTION:

Is it ethical for Engineer A to be associated with XYZ Engineering and Surveying in the manner described?

DISCUSSION:

The circumstances faced by Engineer A in this case are not unlike circumstances occasionally faced by other engineers who seek to explore career opportunities beyond a full-time position. A key question involved in such activities is whether the engineer can devote sufficient attention to the responsibilities involved in an ethical manner.

Engineers are frequently required to provide oversight and review of the work of others under their supervision and sign and seal the drawings. As noted in NSPE Code Section II.2.b. it states that engineers are not permitted to affix their signatures to any plans and documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control. This principle is one of the most basic and fundamental ethical principles to which professional engineers are required to adhere because it goes to the heart of the public trust upon which their professional status is based.

The BER has in the past had occasion to consider cases similar to this case. In BER Case No. 91-8, an Engineer's firm was 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 the Engineer's firm, the site visits would be conducted by engineering technicians under direct supervision of Engineer A who would perform all observations, sampling, and preliminary report preparation. Engineering technicians would also take photographs of the sites. No professional engineers were present during the site visits. Following site visits, all pertinent information and material was presented to Engineer A who was competent in this field. Following a careful review, Engineer A would certify that the evaluations were conducted in accordance with engineering principles.

In considering whether it was ethical for Engineer A to certify that the evaluations were conducted in accordance with engineering principles, the Board noted that the NSPE Code of Ethics is very clear concerning the requirements of engineers not to affix their signatures to any plans or documents dealing with subject matter in which the engineers lack competence, nor to any plan or document not prepared under their direction and control (See NSPE Code Section II.2.b.). The BER concluded that it was ethical for the engineer to certify that the evaluations were conducted in accordance with engineering principles so long as the engineer exercising direction and control performs a careful and detailed review of the material submitted by the engineer's staff and there has been full compliance with NSPE Code Section II.2.c.

Also, in BER Case No. 86-2, an engineer was the chief engineer within a large engineering firm, and affixed his seal to some of the plans prepared by licensed engineers working under his general direction who did not affix their seals to the plans. At times, the engineer also sealed plans prepared by unlicensed graduate engineers working under his general supervision. Because of the size of the organization and the large number of projects being designed 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 were 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 of the facts and circumstances in this case, the Board focused on the language in the NSPE Code Section II.2.b. relating to the obligation of engineers not to 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 ethically to 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. After careful evaluation, the Board concluded that it would not be ethical for the engineer to seal plans that have not been prepared by him or which he has not checked and reviewed in detail.

In BER Case No. 90-6, the Board considered two separate fact situations involving the signing and sealing by an engineer of documents prepared using a CADD system. In considering the facts, the Board noted that the rendering of the Board's decision in BER Case No. 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 No. 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 No. 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 No. 86-2, but rather a clarification, particularly for those who were troubled by the Board's discussion and conclusion in that case."

Once again, we follow the reasoning in BER Case No. 90-6 and its clarification of BER Case No. 86-2. Under the facts in the instant case, we believe it was appropriate for Engineer A to sign and seal the drawings under the facts and circumstance involved in this case. Engineer A is providing approximately thirty-two hours each week of engineering services to the firm and is on call twenty-four hours a day to provide engineering field services for the benefit of the firm and its clients. His responsibilities appear to be consistent with the state's certificate of authorization requirements, are limited to professional engineering services and do not involve land surveying services. As noted under the facts, Engineer A has a flexible schedule with his other employer and presumably is able to adjust his schedule to meet the needs of his employers. While it appears that Engineer A may be stretching his role as an engineer in responsible charge for the firm, without more evidence to suggest improper activity, we are hesitant to conclude that Engineer A was violating the NSPE Code of Ethics.

The manner in which Engineer A is compensated does not appear to contain any specific provision which would necessarily run afoul of the NSPE Code of Ethics. Under NSPE Code Section III.6.a., engineers are not permitted to request, propose or accept a commission on a contingency basis under circumstances in which their judgment may be compromised. Although it could be argued that Engineer A's receiving 5% of the gross billings for engineering work for which the seal of a licensed engineer is required could potentially compromise Engineer A's judgment, we believe that would stretch this provision of the NSPE Code of Ethics beyond its actual intent. Otherwise, virtually any compensation scheme that was not based upon the number of hours worked could be held to be in violation of the NSPE Code of Ethics and that would be an impractical conclusion.

In addition, the Board views the transfer provision ("The agreement is contingent on the understanding that if any one of the three principals of XYZ Engineering and Surveying becomes licensed as a professional engineer in state A, the agreement will become void and the 10% stock will be returned to

XYZ Engineering and Surveying") is not of a nature that would compromise Engineer A's judgment. Instead, the Board views this provision as a means of the firm's principals' maintaining control over the management of the firm.

With regard to Engineer A's dual role as an governmental employee and a private employee, as noted under the facts, both the state governmental agency and the engineering firm are aware of Engineer A's activities as a dual employee and do not object to these activities. However, the Board must note that should a conflict-of-interest arise (e.g., where Engineer A or the firm's activities conflict with the governmental employer's activities or interests) Engineer A will need to carefully address those activities consistent with NSPE Code Sections III.6.b., II.4.d., II.4.e. and other applicable provisions of the NSPE Code.

As has been noted in cases similar to this one, while the actions of Engineer A may be consistent with the NSPE Code of Ethics, it is critical for an engineer under these circumstances to understand the need to perform a careful review of all pertinent material before signing and sealing appropriate plans and drawings. 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 compliance with NSPE Code Section II.2.c. In addition, Engineer A must carefully review and understand all state requirements regarding "responsible charge" activities including possible local office and employment restrictions.

CONCLUSION

It would be ethical for Engineer A to be associated with XYZ Engineering and Surveying in the manner described.

BOARD OF ETHICAL REVIEW

James G. Fuller, P.E. William E. Norris, P.E. Paul E. Pritzker, P.E. Richard Simberg, P.E. Jimmy H. Smith, P.E., Ph.D. C. Allen Wortley, P.E. Donald L. Hiatte, P.E., Chairman

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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 of Ethics 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 services must be performed by real persons. Real persons in turn establish and implement policies within business structures.

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