SUBMISSION BY:

Waukesha Chapter

(Wisconsin Society of Professional Engineers)
References:
Code of Ethics - Section II.1.a.- "Engineers shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgment is overruled under circumstances where the safety, health, property or welfare of the public are endangered, they shall notify their employer or client and such other authority as may be appropriate."

Section II. 2.a.- "Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved."

Section II.5.a.- "Engineers shall not falsify or permit misrepresentation of their, or their associates' academic or professional qualifications. They shall not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. .... "

Discussion:
We are told that Engineer A's area of expertise is electrical engineering and that his most recent employment was as a computer systems engineer with some management responsibilities. He has never worked in the field of environmental services. He was recommended by his supervisor for a position in the environmental services field. The issue at hand is whether an engineer may ethically accept such a position, and whether it is ethical for another engineer to recommend that he take on such a position.

Engineer A refused to accept the position, claiming it was outside of the area of his expertise. The facts as presented do not provide detailed information that clarify the amount of information he was given, or found out by his own research about the position. It is possible that he relied solely on a relatively brief understanding of the position that is provided in the facts as presented to us without attempting to clarify if there was work within the position that he did have the proper experience for. Even if that is the case, he was apparently aware of the requirements that: 1) the position required a P.E, and 2) it involved engineering analysis and design responsibilities.

It would certainly seem that Engineer A would be most interested in keeping his job rather than being terminated and having to find another one. It is also reasonable to believe that Engineer A is the person who best knows and understands his own strengths and weaknesses with respect to his work background. Finally, it should be recognized that there is a considerable difference between the two fields in question in this case, computer systems engineering and environmental services analysis and design. Engineer A could certainly be a contributor to the Department of Environmental Services, using his electrical engineering and computer systems skills, but the case as presented implies that there is much more responsibility associated with the position than this; responsibility that requires knowledge of the environmental engineering business which A does not have.

When Code provision II.1.a. is considered, Engineer A put the safety, health, property and welfare of the public before his personal interests of keeping a job, and therefore made these
issues his or her primary obligation. It would have been very easy to accept the position but yet not perform it in a manner consistent with the Code in this regard. Furthermore, it is not contrary to the Code for any engineer to walk away from any assignment.

Similarly, if Engineer A had accepted the position, given his knowledge of his strengths and weaknesses and his lack of knowledge in the technical field he was being asked to work in, he would have acted in violation of provision II.2.a. This provision shall not be interpreted so narrowly as to not allow an engineer to expand his or her field of expertise. There are many distinct engineering disciplines and numerous facets of each of those disciplines that will allow an engineer to appropriately use their education and background and at the same time learn new technical and engineering skills to expand their knowledge base. Similarly, Engineer A would not have been precluded from joining the environmental services agency and working in a capacity that utilized his electrical engineering and computer systems background in support of that agencies mission, and thereby having him still act in the public’s best behalf. However, with the facts as stated, and given the large differences in the two fields he was considering, Engineer A would have been taking on a position he was not qualified to take on, in conflict with provision II.2.a.

Code provision II.5.a. speaks to falsifying, misrepresenting or exaggerating one’s own or an associates qualifications. These actions appear to imply that those are willful and thought out rather than arbitrary. Engineer B appears to have relied heavily on the fact that in the new position with the environmental services division, Engineer A would be working as part of a larger team of engineers, and that this would presumably allow him or her to function without having a working knowledge of the work. However, the position required a P.E. This indicates that the individual accepting the position would be in responsible charge and therefore need to be knowledgeable about a majority of the work efforts being executed. Engineer B appears to have put the main emphasis on Engineer A keeping his or her job, not on the public welfare.

Conclusions:
Q1. Engineer A acted ethically in declining to accept the position with the Department of Environmental Services.

Q2. Engineer B acted unethically in testifying that Engineer A was qualified to accept the position with the Department of Environmental Services.

Our panel believed that if additional information had been provided to clarify the specifics of Engineer A’s background, his specific responsibilities at the new department, the amount of training that would be provided, and Engineer B’s background and the length of time he has supervised Engineer A, among other things, the case could be decided differently.

The Waukesha, Wisconsin Chapter panel preparing this opinion consisted of Max Schmiege, P.E. and George Lubeley, P.E., with assistance from: Sia Kusha, P.E.; Bill McElwee, P.E.; Pete Van Horn, P.E.; Roger Varner, P.E.; and Dick Zirbel, P.E.