

## Gazette

Volume 20, No. 2 March/April 2001

THE DEPARTMENT OF THE REGISTRAR, PEO

Published by the Association of Professional Engineers of Ontario

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In the matter of a complaint regarding the conduct of a member

## **Decision and Reasons-Stipulated Order**

he Complaints Committee in accordance with Section 24 of the Professional Engineers Act (hereinafter referred to as the "Act") referred the above noted matter to be dealt with by way of a Stipulated Order.

A member ("the reviewing member") of the Discipline Committee of the Association of Professional Engineers of Ontario (hereinafter referred to as "PEO") met with the involved parties at the offices of PEO, located at 25 Sheppard Avenue West in Toronto, Ontario, on June 19, 2000. At that time, the information contained in the complaint was reviewed with the complainant. In a second meeting on June 19, 2000, the member provided an explanation for his actions in this matter.

## The complaint alleged:

- 5.1 In or about March 1996, a regional municipality ("the regional municipality") issued an invitation for proposals for the supply of two hazardous waste storage containers. Several documents were attached to the invitation numbered P96-03, that included Part A Instructions, Terms and Conditions, and Part B Technical Specifications and Drawings.
- 5.2 An overview was included in Part B of the invitation that explained the two containers were to store household hazardous waste materials, such as paints, solvents, corrosive liquids, pesticides, waste pharmaceuticals, batteries and waste oil. The overview also indicated that the two containers were to be new ISO marine containers or equivalent, constructed and modified to meet the Ontario Building Code (OBC) 1990.
- 5.3 The overview referred to specifications in Part B that were considered to be the minimum requirements of the two containers. The specifications comprised 17 sections that included Sec-

- tion 1.3 regarding welding and Section 1.4 regarding structural steel. According to Section 1.3, welding was to be completed in accordance with CSAW59-1989, and performed by a company certified by the Canadian Welding Bureau (CWB) to the requirements of CSA standard W47.1, Division 1 or Division 2.1. According to Section 1.4, structural steel work was to be completed in accordance with Can-S16.1-M89.
- 5.4 Under Part 4 in the 1990 OBC, Section 4.3 relates to design requirements for structural materials, subsection 4.3.4 deals with steel, and Article 4.3.4.1 is entitled "Design Basis for Structural Steel." Article 4.3.4.1 states that buildings and their structural members made of structural steel shall conform to CAN/CSA-S16.1, "Limit States Design of Steel Structures." Clause 24.3 of Standard CAN/CSA-S16.1 requires that fabricators responsible for making welds for structures fabricated under this standard shall be certified by the CWB to the requirements of CSA Standard W47.1, Division 1 or Division 2.1.
- 5.5 In or about March 1996, a company ("the supplier") submitted a proposal to the regional municipality for the supply of two containers manufactured by an American manufacturing company ("the manufacturer"). The manufacturer was not then, and was at no time in the past, certified by the Canadian Welding Bureau to CSA standard W47.1 for fusion welding of structural steel.
- 5.6 On or about May 14, 1996, the regional municipality applied to a local city ("the city") for a construction permit for the installation of two containers at a landfill site located in the city.
- 5.7 On or about May 22, 1996, the regional municipality advised the supplier that its proposal

for the supply of two containers had been accepted. The supplier subsequently engaged the member to review 10 container drawings provided by the manufacturer, and 10 pages regarding container design information and calculations that had been prepared for the manufacturer by an American professional engineer.

- 5.8 By a letter "To whom it may concern" in July 1996 under the letterhead of the member's company (company "A"), the member advised that: "After reviewing the manufacturer's drawings and calculations, we stamped and signed the drawings as requested. The design and drawings meet and, in some cases, exceed the Ontario Building Code and CSA welded steel construction code." The 10 container drawings under the title block of the manufacturer carried the seal and signature of the member, and were dated July 1996.
- 5.9 By a letter to the manager of engineered products ("the manager") of the supplier, dated July 1996 under the letterhead of company "A," the member confirmed similar information to that contained in the member's July letter, "To whom it may concern."
- 5.10 By a second letter to the manager of the supplier, dated July 29, 1996 under the letterhead of company "A," the member advised that company "A" was not insured for professional liability in accordance with the minimum requirements of Ontario Regulation 538/84 made under the Professional Engineers Act, 1984. The member also indicated in his letter that the liability of company "A" was limited to the total fee for work and or materials provided by company "A." Attached to his letter was an invoice dated July 29, 1996 to the supplier for the engineering services rendered by company "A" in the amount of \$321.
- 5.11 On or about June 20, 1996, and prior to the three company "A" letters dated July 29, 1996 signed by the member, PEO received an application for a Certificate of Authorization (C of A) from a company (company "B"). On the C of A application, the member was listed as the engineer who assumed responsibility for the services provided by company "B." By signing the C of A application on June 1, 1996 as an employee of company "B," the member was, or ought to have been, aware of the requirement to hold a C of A in order to provide engineering services to the public. The C of A for company "B" has since been withdrawn for non-payment of fees.
- 5.12 During the week of September 23, 1996, the two containers were delivered to the landfill site in the city.
- 5.13 On or about February 24, 1999, PEO received an application for a C of A from a third company (company "C"). On the C

of A application, the member was listed as the engineer who assumed responsibility for the services provided by company "C." On or about March 3, 1999, a C of A was issued by PEO to the member for company "C."

5.14 As part of the C of A application process, on March 2, 1999, the member submitted his curriculum vitae (CV) to PEO. The CV indicated that the member's work experience from 1980 to 1999 was gained mostly as a project/field engineer/manager in the specialized fields of computers, mechanical and electrical engineering, and that the member was currently employed as a senior mechanical engineer involved with mechanical systems such as HVAC, plumbing, fire suppression systems and computer facilities.

5.15 It is alleged that the member:

- 5.15.1 made a false and misleading statement that hazardous waste storage containers supplied by the manufacturer were in compliance with OBC and CSA requirements, when the containers were not in compliance;
- 5.15.2 sealed drawings that were not in accordance with the requirements of the OBC;
- 5.15.3 sealed drawings that were not in compliance with the project specifications:
- 5.15.4 sealed drawings without ensuring that the manufacturer was certified by the CWB to the requirements of CSA Standard W47.1, Division 1 or
- 5.15.5 sealed drawings and reviewed design information and calculations in a civil engineering field, when his CV indicated his previous work experience was mostly gained in the fields of computers, mechanical and electrical engineering;
- 5.15.6 offered and provided engineering services to the public by sealing the manufacturer's drawings while not a holder of a C of A; and
- 5.15.7 knew, or ought to have known, that by sealing the manufacturer's drawings, he required a C of A in order to provide engineering services to the public.
- 5.16 It is alleged that the member is guilty of professional misconduct, and/or incompetence as defined in the Professional Engineers Act.

The complainant indicated that the primary concern of the CWB was the member's certification in his letter dated July 29, 1996 that: "The design and drawings meet and in some cases exceed the Ontario Building Code and CSA Welded Steel Construction Code."

The complainant advised that neither the member, nor the manufacturer were certified with CWB, which is a requirement under CSA Standard W47.1.

The complainant stated that CWB received the member's letter of certification dated July 29, 1996, which had been provided to the city by the supplier. The complainant stated that the OBC Section 4.3.4.1 calls up CSA-S16.1, which, in turn, calls up CSA Standard 47.1.

Section 4.3.4.2 of the OBC 1997 states: "Design Basis for Cold Form Steel: 1. Buildings and their structural members made of structural steel shall conform to CAN/CSA S16.1-M, "Limit States Design of Steel Structures."

Section 16.6.17.1 and 16.6.17.3 state respectively:

- "16.6.17.1 Arc welding design and practice shall conform to CSA Standard W59";
- "16.6.17.3 Fabricators and erectors of welded construction covered by this standard shall be certified by the CWB in Division 1 or Division 2.1 to the requirements of CSA Standard W47.1, or W55.3, or both as applicable.

CWB provides certification services for companies wishing to be certified in conformance to CSA W47.1. W47.1-92, which is called up by Section 16.1 and states:

- "1.1 This standard specifies the minimum requirements to be met and adhered to by companies wishing to be certified and maintain certification for fusion welding of steel structures performed as part of the fabrication, fabrication and erection, or erection thereof.
- "1.2 This standard is intended to govern certification of companies, and prescribes the standards and tests of procedures and personnel necessary for the issuance of a document of certification of such companies. It should not be construed as approving any products or services of such companies.
- "1.3 All welding of steel structures performed by or on behalf of a certified company shall be in accordance with all the requirements of this standard, unless specified to the contrary and agreed to between the purchaser and the company. The certified company shall satisfy the CWB as to the manner in which it will assure that all work that must comply with this standard will be performed."

CSA W59 Section 6 refers to the qualification of contractors. Pursuant to Section 6.1(a), a contractor is required to be certified under the requirements of CSA Standard 47.1.

The complainant advised that OBC 1997 Section 4.3.4.1 "Design Basis for Structural Steel" calls up CAN/CSA S16.1- 94 "Limit States Design of Steel Structures," and that clause 16.6.17 "Welding Open Web Steel Joists" calls up CSAW47.1-1992 "Certification of Companies for Fusion Welding of Steel Structures."

The complainant stated that in the member's response to the complaint, he acknowledged that he was not aware of the requirements under the OBC. The complainant stated that having assumed the role, which the member did on the supplier's behalf, he should have asked the supplier for proof of certification and that he failed to do so. He stated that, in his view, the member had no comprehension of the CWB requirements or the CSA standards. He stated that the member relied on a CSA trademark logo on the manufacturer's brochure, but this logo could have referred to any component of CSA.

The complainant advised that, in order for the member to have stated that the design and drawings met or exceeded the OBC, the requirements of CAN/CSA S16.1 M had to be met.

Further, in stating that the CSA Welded Steel Construction Code was met or exceeded, the complainant said the member provided a false statement, as the supplier was not certified.

The complainant stated that, with regard to the allegations and the complaint, that it was not an exact requirement with respect to paragraphs 5.15. 2, .3 or .4, and that 5.15.1 is the primary complaint, i.e. the member "made a false and misleading statement that hazardous waste storage containers supplied by the manufacturer were in compliance with OBC and CSA requirements, when the containers were not in compliance."

The complainant stated that, with respect to the drawings, the CWB had no comment on a number of the drawings, some of which have nothing to do with welded connections.

The complainant questioned why, if the member was just doing the design, would he make the representation that he did in his let-

The complainant stated that the OBC does not refer directly to the requirements, but calls up other recognized standards. Although the manufacturer might be CSA certified for some aspects of its supplies, he stated that they were not CWB certified. He stated that CWB subsequently wrote to the manufacturer about getting certified, and there was no response. He stated that they sent the manufacturer a standard information package. The cost of CWB certification is based on the number of welders employed by the company. He stated that this contract required that all welding be in accordance with CSA

The complainant advised that the member stated in his response to the complaint that he was not aware of the requirements,

and that he was asked by a friend to certify the containers. It was apparent that the member proceeded to certify that they met the OBC requirements, but he did not know the requirements and stated that the welding code requirements were met when he was not aware of the requirements.

In conclusion, the complainant stated that the responsibility was on the supplier to ensure that the requirements under the OBC were met. The manufacturer was not certified, and the supplier retained the member to certify the containers. He stated that the member had to check that the manufacturer was certified, and he failed to do so. He stated that CWB was looking for publication in Gazette without names and a reprimand. He stated that the member could have determined through CWB whether the manufacturer was certified. From the literature provided by the manufacturer, it appears that its CSA certification relates to fire protection.

The reviewing member of the committee met with the member and his legal counsel. Legal counsel made submissions on behalf of his client. He stated that the complaint was motivated by protectionism. He stated that they were somewhat disappointed by the decision of the Complaints Committee to refer this matter to discipline to be dealt with by way of Stipulated Order.

He stated that the member stamped some drawings and provided a letter dated July 29, 1996. In his response to the complaint, the member indicated that he had no knowledge of the specifications. Legal counsel stated that his client was dealing with a proprietary product and had been asked to review the design of the product. He stated that the complaint was not that the containers supplied were not in accordance with CSA Section 16.1. Legal counsel stated that they had no knowledge of whether the containers were manufactured in compliance with the code or not. He stated that the member was not asked to go beyond reviewing the design, and that he was not being asked to review the fabrication or carry out inspection. He stated that the member was given some drawings, and his response to the complaint sets out the limits of his retainer and the materials, which he reviewed.

Legal counsel stated that the member asked the supplier for drawings and called the manufacturer for their drawings. The supplier provided a brochure from the manufacturer, which indicated that they were CSA certified. He stated that the manufacturer had to be CSA certified to manufacture the product, but not to design it.

Legal counsel stated that the scope of responsibility being attributed to the member was beyond the scope of his retainer. Legal counsel produced a letter from the manager of the supplier dated June 8, 2000, pertaining to the extent of the member's retainer. This letter reads:

"I was shocked to hear of your ordeal. As such I have prepared this letter for your use as the situation necessitates.

"This letter is a synopsis of the events that took place in regards to the regional municipality, Hazardous Waste Storage Container Project. On or about July of 1996, in my capacity as manager, I contacted the member, to inquire if he would consent to supply professional engineering evaluation and approval consistent with the Ontario Building Code on drawings and documents for the storage structures from our U.S. supplier (the manufacturer). I had known the member through his company (company "A"), which had supplied professional services to the company for a number of years going back to prior to my employment with the supplier. The member consented to do this service and mentioned that he is insured to do so through his employer (company "B").

"The member did the necessary calculations and confirmed his opinion as a professional engineer that the drawings met or exceeded the Ontario Building Code for such structures by stamping the drawings. The approval was expected, since the manufacturer was a premier manufacturer of such structures and carried CSA certification, as well as UL listing and FM approval.

'The member's role is purely what is described above. He was not privy to any financial document, pricing issues or any other tender particulars, other than the specifications in the sections required to perform the above mentioned task.

"The member billed the supplier through company "A," due to the fact that they were a known vendor with previous dealings and was duly paid for the service. Hope this will shed some light on these transactions.'

Legal counsel stated that, with respect to allegation 5.15.1 in the complaint, the member only had drawings and specifications and not fabrication specifications, and that while the member did not review any fabrication specifications, he did not think that the drawings were deficient.

With respect to the drawings, legal counsel stated that there were no requirements for the member to satisfy himself that the manufacturer was CWB certified. The member reviewed the drawings for load requirements and satisfied himself that the load requirements were met. He stated that the member's role was limited to an elementary review, and the furthest that PEO could take the complaint was that the member should have red-flagged the requirements for welding certification under the Ontario Building Code.

Legal counsel submitted that this was not professional misconduct.

In response to questions by the reviewing member, the member stated that he felt he was competent to deal with the matter with the assistance that he got from someone in the office who knew the codes. He stated that it was not part of his retainer to ensure that the manufacturer was CWB certified.

In addition to this issue, the complaint alleged that the member provided the services while not a holder of a Certificate of Authorization. Legal counsel submitted that there was technical noncompliance in this regard. At the time, he stated that the member was employed by company "B." The member stated that he was approached by the supplier and provided the engineering services through company "A," which is his company. He stated that he had provided similar services to the supplier in the past. He stated that a C of A was issued to company "B." He acknowledged that there was a "technical noncompliance." He stated that he did this work as a favour to a friend at the supplier's office.

With respect to the certification letter dated July 29, 1996, the member stated that there was no intent to mislead anyone, and he regretted that the whole thing had occurred. He stated that on October 29, 1998, he met with CWB and tried to get the manufacturer certified.

He stated that he was aware that the containers were to be designed in accordance with the Ontario Building Code specifications. He stated that, with respect to the Ontario Building Code requirements, he reviewed the calculations and everything was below the load bearing requirements. Unfortunately, he did not look at the CWB ramifications. He stated that he reviewed the loadings with a colleague, including the welding connections. The member stated that he did not concern himself with the fabrication specifications.

The reviewing member asked the member where the design part of his welding calculations was. On reviewing his calculations, the member confirmed that these did not refer to welds, although reference is made on the drawings to the size of welds. The member stated that his statement that the design and drawings met and in some cases exceeded the CSA welded steel construction code was a reiteration of what the manufacturer advised him. He stated that he could not recall what he reviewed or had to review. He acknowledged that he did not determine that the manufacturer was not CWB certified.

Legal counsel stated that the complaint did not allege that he was required to do so.

The member stated that he was satisfied that the containers were safe. He agreed that the July 29, 1996 letter was written hastily. He asked what more could he do and why was he required to call up the manufacturer to ask them if they were CWB certified.

Legal counsel submitted that there was no evidence that the containers did not comply with the codes and he added that in the July 29, 1996, "To whom it may concern" letter, the member was not certifying the end product.

In legal counsel's submission, there was no obligation on the part of the member to red-flag the issue. He submitted that the design drawings met the requirements of the code, and that the only complaint could be that the member did not red-flag the requirements of CSA S16.1.

The reviewing member of the Discipline Committee retired to deliberate and consider the available information. The reviewing member found the following information to be significant:

- 1. The member was retained to review the design and drawings, and it is his position that he was under no obligation to obtain documentation of CWB certification from the supplier or request the CWB for the same.
- 2. The Ontario Building Code calls up CSA Section 16.1, which, in turn, calls up CSA 47.1.
- 3. In a letter addressed "To whom it may concern" dated July 29, 1996, the member certified that: "The design and drawings meet and in some cases exceed the OBC and CSA Welded Steel Construction Code."
- 4. The member's evidence and submissions made on his behalf by his legal counsel were that he was retained by the supplier to review design and drawings, and his focus was on the loads.
- 5. There was no satisfactory explanation given by the member that he understood what was required under the Ontario Building Code.
- 6. The CSA Welded Steel Construction Code referred to in the member's letter dated July 29, 1996 is not a code, but reference to it in the July 29, 1996 letter implies that the member considered the welding requirements under the Ontario Building Code which calls up CSA S16.1 W59 and 47.1, when clearly he did not do so.
- 7. On questioning by the reviewing member, it was clear that the member had not reviewed and taken the sections into consideration in providing his letter of certification
- 8. It was also acknowledged by the member

that there was a "technical noncompliance" with respect to him providing these services without a Certification of Authorization.

The reviewing member considered that there was an onus on someone reviewing shop drawings to confirm compliance with all Canadian standards, especially when the drawings were not provided by a Canadian supplier or manufacturer. The reviewing member found that, although the design and drawings may meet Section W59, this Section calls up Section W47, which requires CWB certification of the certifier. The reviewing member found that any P.Eng. reviewing design drawings must ensure that the appropriate documentation is obtained and the applicable codes are met.

The member relied on a letter from the manufacturer dated June 3, and simply reiterated its statements in his letter of certification. In this instance, the member relied on the CSA trademark in the supplier's brochure, when that related clearly to fire protection and not welding.

There was nothing in the drawings or specifications that satisfied the reviewing member that there was foundation for the member's statement that the design drawings met and in some cases exceeded the "CSA Welded Steel Construction Code."

The reviewing member of the Discipline Committee, after consideration of all facts and based on the foregoing, found that there were breaches of Ontario Regulation 941 made under the Professional Engineers Act, specifically Section 72 (2)(d): "Failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, bylaws and rules in connection with work being undertaken by or under the responsibility of the practitioner" and Section 72 (2)(g): "Breach of the Act or Regulations, other than an act that is solely a breach of the Code of Ethics."

The reviewing member found that the member provided engineering services without a Certificate of Authorization.

The reviewing member ordered the following:

- 1. That the matter be published without names.
- 2. That the member be reprimanded.

Dated at Toronto, this 18th day of September, 2000

Anne S. Poschmann, P. Eng.

## Note from Registrar's Department

The reprimand was carried out on June 19, 2000