

## DECISION AND REASONS

In the matter of a hearing under the *Professional Engineers Act* and in the matter of a complaint regarding the conduct of CHUNG-WAI CHAN, P.ENG., a member of the Association of Professional Engineers of Ontario, and M.V. SHORE ASSOCIATES (1993) LTD., a holder of a Certificate of Authorization.

This matter came on for hearing before a panel of the Discipline Committee on February 2, 2009 at the Association of Professional Engineers of Ontario (PEO or association) in Toronto. The association was represented by Neil J. Perrier. Chung-Wai Chan, P.Eng. (Chan or member), and M.V. Shore Associates (1993) Ltd. (MVS), were represented by Gary W. Gibbs. David P. Jacobs acted as independent legal counsel (ILC).

### THE ALLEGATIONS

Counsel for the association filed a Statement of Allegations signed by the chair of PEO's Complaints Committee and dated June 20, 2008.

The panel was advised of certain corrections to the original document. The corrected allegations against Chan and MVS are as follows:

1. Chan was, at all material times, a member of the Association of Professional Engineers of Ontario.
2. MVS was, at all material times, the holder of a Certificate of Authorization (C of A) to offer and provide to the public services that are within the practice of professional engineering, and was responsible for supervising the conduct of its employees and taking all reasonable steps to ensure that its employees, including Chan, carried on the practice of professional engineering in a proper and lawful manner. Chan was one of the professional engineers responsible for the services provided by MVS.
3. MVS was retained to review and comment on reports and testing performed by Bowser Techni-  
cal Inc. on the heating, air conditioning and ventilation (HVAC) systems of two single-family residences in Oakville, Ontario. The residences were production townhouses/units built by a local builder, Fernbrook Homes. The engineering comments and verification services provided were for 2346 Woodfield Road and 2350 Woodfield Road, Oakville, Ontario, but were applicable to the other homes in the townhouse development to resolve the heating and cooling situations.
4. On or about November 18, 2004, MVS provided a report to Tarion Warranty Corporation (Tarion) that was signed by Rudy Zugec (Zugec), a principal of MVS, but not a professional engineer. The November 18, 2004 report included the following as the professional opinion of MVS:
  - (a) The existing/installed HVAC equipment would deliver air flow of 1100 cubic feet per minute (cfm);
  - (b) The Bradford White eF Series model water heater recommended (to replace existing equipment) was capable of providing a 180-degree water supply and that 130 degrees would suffice to produce the required BTUs; and
  - (c) If, after these alterations were completed, the required cfm was not achieved, then another Energy Product A/C coil model RM would be required to satisfy the heating and cooling for this dwelling.
5. On or about February 21, 2005, MVS provided a report to Tarion signed by Zugec and sealed by Chan. The February 21, 2005 sealed report included the following:

- (a) Based on calculations performed by Air Deflections, it was determined a velocity of 903 cfm was produced through the air handler;
  - (b) Based on the water temperature and availability from the tank, it was calculated there was more than adequate heating for 2350 Woodfield Road;
  - (c) Downview Heating (Downview or contractor) conducted temperature readings in each room and it was determined that the temperature in each room was in close relation to that set on the thermostat; and
  - (d) Based on alterations/recommended unit(s) to the residential units, it was their professional opinion that repairs of this nature be conducted on other Tarion-warranted homes to resolve the heating and cooling situations.
6. Concerns regarding the work of MVS and Chan, and deficiencies in the prescribed HVAC remediation included the following:
- (a) They prescribed remediation measures to the HVAC systems with no scientific basis;
  - (b) They provided services deficient and devoid of mechanical engineering expertise;
  - (c) They advised that proposed remediation prescribed would be similarly applicable to all affected properties without evidence of heating and cooling sufficiency and proven insufficiency to achieve projected air flows;
  - (d) They provided engineering reports that lacked the required professional engineering input;
  - (e) They provided professional opinions without the authorship, stamp and signed confirmation of a qualified professional engineer;
  - (f) They provided erroneous conclusions with no apparent independent analysis or measurement; and
  - (g) They provided engineering services that failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances.
7. PEO obtained an independent third-party report from Greg Allen, P.Eng. (Allen), of Sustainable Edge Ltd., regarding the standard of practice of Chan and MVS in relation to the subject properties. Among other things, Allen concluded that:
- (a) MVS rendered engineering reports that did not bear the seal of a licensed professional engineer;
  - (b) MVS reports, including a report sealed by Chan, appeared to have no independent analysis or measurement;
  - (c) MVS reports, including the report sealed by Chan, were without supporting documentation;
  - (d) MVS reports, including the report sealed by Chan, contained errors in that there was no scientific basis for contending that the prescribed measures would correct air flow, heating and cooling deficiencies;
  - (e) MVS and Chan provided an engineering opinion that similar repairs be conducted on other Tarion warranted homes to resolve the heating and cooling situations without having conducted the required investigations and engineering analysis;
  - (f) The services provided by MVS were devoid of mechanical engineering expertise; and
  - (g) The work performed by MVS and Chan failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances.
8. It is alleged that Chan and MVS:
- (a) provided engineering services that failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances;
  - (b) failed to make responsible provision for the safeguarding of life, health and property regarding prescribed remediation of the HVAC systems; and
  - (c) failed to make reasonable provision for complying with applicable statutes, standards, codes and rules in connection with the prescribed remediation of the HVAC systems.
9. It is alleged that Chan is incompetent as defined in section 28(3)(a) of the *Professional Engineers Act*, and that Chan and MVS are guilty of professional misconduct as defined in section 28(2)(b) of the *Professional Engineers Act*.

**STATEMENT OF AGREED FACTS**

Counsel for the association advised the panel that agreement had been reached on the facts and introduced a Statement of Agreed Facts, which provides as follows:

- 1. Chan was, at all material times, a member of the Association of Professional Engineers of Ontario.

2. MVS was, at all material times, the holder of a C of A to offer and provide to the public services that are within the practice of professional engineering, and was responsible for supervising the conduct of its employees and taking all reasonable steps to ensure that its employees, including Chan, carried on the practice of professional engineering in a proper and lawful manner. Chan was the professional engineer responsible for the services provided by MVS.
3. MVS was retained by Downsview to review and comment on a report and testing performed by Bowser Technical Inc. on the HVAC systems of two single-family residences in Oakville, Ontario. The residences were production townhouses/units built by a local builder, Fernbrook Homes. The engineering comments and verification services provided were for 2346 Woodfield Road and 2350 Woodfield Road, Oakville, Ontario, but one report was stated to be applicable to the other homes in the townhouse development to resolve the heating and cooling situations.
4. On or about November 18, 2004, MVS provided a report addressed to Tarion that was signed by Zugec, a principal of MVS, but not a professional engineer. The November 18, 2004 report included the following as the professional opinion of MVS:
  - (a) The existing/installed HVAC equipment would deliver air flow of 1100 cubic feet per minute (cfm) if installed with the maximum required heating outlets specified by the manufacturer;
  - (b) The Bradford White eF Series model water heater recommended (to replace existing equipment) was capable of providing a 180-degree water supply and that 130 degrees would suffice to produce the required BTUs; and
  - (c) After these alterations were completed, an air flow test would be conducted. If the required cfm measurement was not achieved, then another Energy Product A/C coil model RM would be required to satisfy the heating and cooling for this dwelling.
5. On or about February 21, 2005, MVS provided a report to Tarion signed by Zugec and sealed by Chan. The February 21, 2005 sealed report included the following:
  - (a) Based on calculations performed by Air Deflections, it was determined that a velocity of 903 cfm was being produced through the air handler;
  - (b) Based on the water temperature and availability from the tank, it was calculated there was more than adequate heating for 2350 Woodfield Road;
  - (c) Downsview conducted temperature readings in each room and it was determined that the temperature in each room was in close relation to that set on the thermostat; and
  - (d) Based on alterations to the two tested residential units, it was their professional opinion that repairs of this nature be conducted on other Tarion warranted homes to resolve the heating and cooling situations.
6. It is agreed that the work of MVS and Chan was deficient and failed to meet the standard of practice of the profession as follows:
  - (a) They prescribed remediation measures to the HVAC systems without adequate investigation or engineering analysis;
  - (b) They advised that proposed remediation prescribed would be similarly applicable to all affected properties without evidence of heating and cooling sufficiency and proven insufficiency to achieve projected air flows without adequate investigation or engineering analysis;
  - (c) They provided professional engineering reports that lacked adequate professional engineering input;
  - (d) They provided a professional engineering report without the authorship, stamp and signed confirmation of a qualified professional engineer;
  - (e) They provided conclusions with inadequate independent analysis or measurement; and
  - (f) They provided engineering services that failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances.
7. It is agreed that neither of the residences at 2346 or 2350 Woodfield Road received an HVAC system that delivered the expected volume of air of 1100 cfm, despite the implementation of the recommendations contained in the reports of MVS and Chan.
8. It is agreed that Chan and MVS:
  - (a) provided engineering services that failed to maintain the standards that a reasonable and prudent

- practitioner would maintain in the circumstances; and
- (b) failed to make responsible provision for the safeguarding of health and property regarding prescribed remediation of the HVAC systems.
9. It is agreed that Chan and MVS are guilty of professional misconduct as defined in section 28(2)(b) of the *Professional Engineers Act*.

Counsel for the member stated that there were variations between the Statement of Allegations and Statement of Agreed Facts, as follows:

- (a) The word “life” appearing in item 8(b) of the Statement of Allegations had been dropped in the Statement of Agreed Facts; and
- (b) Item 8(c) of the Statement of Allegations was not included in the Statement of Agreed Facts.

Counsel for the association advised that the association was withdrawing the allegation of incompetence and that he would call no evidence relating to the allegations that were being withdrawn. The member waived the necessity of the association adducing evidence with respect to the allegations of professional misconduct to which he pled guilty. Counsel for the association further advised that the complainants were made aware of this.

The ILC advised that, under the act, counsel for the association may have no authority to withdraw part of the allegations and that there may be a conflict between the act and the rules of procedure of the Discipline Committee, which rules appear to permit such withdrawal.

Counsel for the association argued that, until the rules of procedure of the Discipline Committee were revised, both parties were bound by the rules. The counsel for the member concurred with the counsel for the association and submitted that there were precedents for this in Discipline Committee decisions for over a decade in this regard.

#### **PLEA BY MEMBER AND/OR HOLDER**

The member admitted guilt on his own behalf and on behalf of MVS (holder) as the professional engineer responsible for the C of A for the holder, as outlined in the Statement of Agreed Facts.

The panel conducted a plea inquiry of the member and the holder and was satisfied that the admission was voluntary, informed and unequivocal.

#### **WITHDRAWAL OF PANEL MEMBER**

ILC advised the panel and the parties that certain information had been brought to his attention by one of the panel members, Phil Maka, P.Eng., who had been contacted via telephone by a member of the association and presented with information relevant to a number of hearings ongoing in the association prior to the start of the hearing. As Maka had no knowledge of the facts relating to this hearing prior to the start of the hearing, he did not initially believe that the conversation could be relevant to this particular hearing. The relevancy became apparent to him after the hearing commenced and he brought the information to the attention of ILC.

None of the facts or opinions expressed in the telephone conversation had been shared with other panel members.

Both parties agreed that Maka should not continue as a member of the panel and should recuse himself. Maka withdrew from the panel and the hearing continued with the remaining panel members.

#### **DECISION**

The panel considered the following:

1. Statement of Allegations;
2. Statement of Agreed Facts (SAF);
3. Statement by PEO counsel that no evidence will be submitted to the panel as to the allegation of incompetence; and
4. The plea by the member and the holder.

The panel, therefore:

- (a) accepted the member’s plea and found Chan and MVS guilty of professional misconduct as defined in section 28(2)(b) of the act; and
- (b) determined that the burden of proof with respect to the balance of allegations against the member had not been met. Hence, the panel dismissed the remaining such allegations.

#### **REASONS FOR DECISION**

The panel accepted the SAF and was satisfied in regard to the finding of guilt with respect to misconduct. There was no evidence before the panel for it to base any finding of guilt on the other allegations, including incompetence, made against the member. The conflicting positions of counsels as to the enabling authority to accept the withdrawal were not reconcilable; however, as no evidence was presented by counsel for the association as to the balance of the

allegations, an order of dismissal was appropriate as the burden of proof had not been satisfied.

### **SUBMISSIONS RELATING TO THE PENALTY**

A Joint Submission on Penalty was made to the panel indicating agreement on three items, as detailed in the penalty decision (items 1, 2, 3).

Counsel for the association submitted that the Discipline Committee should impose publication of the Decision and Reasons, with names, in the official publication of the association as part of the penalty. Counsel for the association argued that the member and C of A holder were in serious dereliction of duty and this warrants publication with names.

Counsel for the member argued that publication with names was unnecessarily punitive. As mitigation, it was argued that the member had not previously been before the Discipline Committee, had admitted allegations of professional misconduct and had co-operated with the association to avoid protracted proceedings. It was submitted that the member is remorseful and the impugned actions are unlikely to be repeated.

### **PENALTY DECISION**

The panel accepts the Joint Submission as to Penalty and has considered the arguments made by both parties regarding publication, with or without names.

The panel orders that:

1. The member and the holder shall be reprimanded and the fact of the reprimand recorded on the register for a period of 12 months;
2. The member and the holder shall submit a professional practice management plan to the satisfaction of the registrar within six months of the date of the hearing, failing which the member's designation as a consulting engineer and the permission for the holder to use the consulting engineer title shall be suspended until such time as the member and the holder submit a professional practice management plan to the satisfaction of the registrar;
3. The member shall write and pass the professional practice examination (PPE) within 12 months of the date of this hearing, failing which his licence shall be suspended. If the member does not pass the PPE within 24

months of the date of this hearing, his licence shall be revoked; and

4. This Decision and Reasons be published, with names, in the official publication of the association.

### **REASONS FOR PENALTY DECISION**

The panel considered the Joint Submission on Penalty and concluded that the proposed penalty is reasonable and in the public interest. Chan and the holder have co-operated with the association and, by agreeing to the facts and a proposed penalty, have accepted responsibility for their actions and have avoided unnecessary expense to the association.

In consideration of the penalty, the panel employed the following guiding principles:

- protection of the public;
- maintenance of the image of the profession;
- general deterrence;
- specific deterrence; and
- rehabilitation.

The panel was satisfied that items 1, 2 and 3 of the penalty decision satisfied the requirements relating to specific and general deterrence, as well as rehabilitation of the member. The goal of rehabilitation should be addressed additionally by the efforts of the member and holder in reviewing work practices to avoid recurrence.

There were no compelling reasons to exclude names; publishing with names demonstrates openness as expected by the public. Also, the publication of the decision with names serves as general deterrence to the other members of the profession, reminding them of their specific responsibilities to the profession and to the public. It also serves to maintain a positive image of the profession in the eyes of the public, indicating that such actions are viewed seriously by the profession.

### **REPRIMAND**

The member and the holder waived their right to appeal, and the panel administered an oral reprimand following the hearing.

The written Decision and Reasons were dated March 12, 2009, and were signed by Santosh Gupta, PhD, P.Eng., as the chair on behalf of the other members of the discipline panel: Kam Elguindi, P.Eng., David Robinson, P.Eng., and Virendra Sahni, P.Eng.