COMPILED BY BRUCE MATTHEWS, P.ENG.

Decision and Reasons

In the matter of a discipline hearing under the *Professional Engineers Act* and in the matter of a complaint regarding the conduct of:

Kwang-Ray Hsu, P.Eng.

a member of the Association of Professional Engineers of Ontario and a holder of a Certificate of Authorization.

This matter came on for hearing before a panel of the Discipline Committee on January 10, 2005 at the Association of Professional Engineers of Ontario (the "association") in Toronto. The association was represented by William D. Black of McCarthy Tétrault. Kwang-Ray Hsu, P.Eng., was represented by Paul J. Sullivan, LLM.

The Allegations

In a Revised Notice of Hearing dated January 6, 2005, it was alleged that Kwang-Ray Hsu, P.Eng., is guilty of professional misconduct and/or incompetence as defined in the *Professional Engineers Act* (the "Act").

Plea by Member

Kwang-Ray Hsu, P.Eng., ("Hsu") admitted the allegations of professional misconduct and incompetence as set out in the Revised Notice of Hearing. The panel conducted a plea inquiry and was satisfied that the member's admission was voluntary, informed and unequivocal.

Agreed Facts

Counsel for the association and counsel for the member advised the panel that agreement had been reached on the facts and that the factual allegations as set out in the Revised Notice of Hearing were accepted as accurate by the member.

The Agreed Facts are as follows:

1. Hsu was first licensed as a professional engineer in the Province of Ontario on January 26, 1968.

2. Hsu is the holder of a Certificate of Authorization under the Act and first held a Certificate of Authorization as of August 1, 1987.

3. In or about March 2001, the City of Toronto's Building Department (the "city") received five drawings for review from an applicant, Three Line Architectural Designers ("Three Line"). The submission of these drawings was to reflect the as-built condition of a row-house project located at 431, 433, 435A and 435B Bathurst Street in Toronto. The drawings were neither sealed by a professional engineer nor numbered. The drawing for 431 Bathurst Street was dated March 2001. The original permit drawings, which had been issued for this project, were based on Part 9 of the *Ontario Building Code* ("OBC"). A review by the city indicated that the new submission by Three Line reflected structural changes, some of which exceeded the prescriptive design requirements contained in Part 9 of the OBC. In the circumstances, the city required a professional engineer to assess compliance with the OBC.

4. Pursuant to this request, the city received another set of drawings on May 14, 2001 from Three Line numbered A1 to A3, dated May 2001 ("set #1"), which were sealed, signed and dated April 10, 2001 by Hsu. Set #1 included framing and design changes that fell outside the scope of Part 9 of the OBC.

5. The row houses were three storeys high and 47'6" deep x 15'6" to 21' wide. Each unit had a bay window at the front of the second floor and a built-up flat roof deck at the rear of the third floor.

6. By letter dated May 10, 2001 accompanying set #1, Hsu provided the following comments in respect of issues arising in the design:

(a) The party walls between the units were changed from 8" masonry walls to double 2" x 4" framing with 5/8" type-X fire-rated gypsum boards on both sides. The party wall between units 431 and 433 remained as 8" block.

(b) The first and second floor joists in units 433, 435A and 435B were changed from 11 7/8" TJI Pro 150 at 16" c/c to 2" x 12" at 16" c/c.

(c) All floor joists in unit 431 were changed from 11 7/8" TJI Pro 150 at 16" c/c supported on the party wall to 2" x 12" at 16" c/c supported on 4-2" x 12" "laminated" beams, which spanned between the party wall and exterior load bearing wall.

(d) The joist span direction was revised so that the 2" x 12" joists spanned

parallel to the party wall and were supported on the 4-2" x 12" "laminated" beam. The 2" x 12" joists framed into the sides of the 4-2" x 12" "laminated" beam.

(e) The roof framing of all units was changed from 9-1/2" TJI Pro 150 at 16" c/c to 2" x 10" rafters at the same spacing, bearing on two rows of 2" x 6" knee walls also at the same spacing and 4-2" x 12" built-up beams underneath. In unit 431, the direction of the roof joists was revised to the same as the floor joists.

(f) The north foundation wall in unit 435A was changed from a regular strip footing to a 3'0" x 12" offset reinforced concrete footing as per section F1 on drawing A3.

7. Following its review of set #1, the city issued an Examiner's Notice dated May 17, 2001, indicating that there was insufficient information on set #1 for it to assess compliance with the OBC. Spot checks by the city indicated that the 4-2" x 12" "laminated" SPF Grade 1/2 beams were overstressed 330 per cent in bending, when the city did not assume any increase in beam capacity due to the plywood laminations. The city requested the following information:

(a) engineering calculations for:
  (i) 4-2" x 12" "laminated" and built-up beams in all units;
  (ii) 2" x 12" floor joists spaced at 16" c/c with spans exceeding 15.8 feet; and
  (iii) 3-2" x 12" beams at the rear adjacent to the exterior decks in units 433, 435A and 435B;

(b) the size of the beams located in the second floor over the bay windows;

(c) structural calculations for foundation wall at section F1 on drawing A3;

(d) confirmation of soil condition and capacity at the foundation at section F1 on drawing A3;

(e) a cross-section through the masonry party wall from the roof line to the footing level, and information regarding bearing location with applicable structural calculations; and

(f) information pertaining to the lateral support of the wood frame party wall, which exceeded one storey in height adjacent to the stair opening.

8. On May 29, 2001, the city received revised drawings numbered A1 to A3 dated May 2001 (set #2) that Hsu had sealed and signed on May 28, 2001, together with structural design calculations that were neither sealed nor signed.

9. The city reviewed set #2 and the structural design calculations and commented that, in addition to certain issues being unresolved from the May 17, 2001 Examiner's Notice, major structural deficiencies and design errors existed in set #2 for unit 431 as follows:

(a) While the drawings indicated that the "laminated" floor beams had half-inch plywood layers between the 2" x 12" joists, a June 8, 2001 site visit by the city and Hsu revealed that these beams had discontinuous pieces of wafer board instead of plywood. The city considered the beams to be 4-ply built-up rather than "laminated."

(b) In set #2, Hsu reduced the span of the 4-2" x 12" "laminated" beams with the addition of a 4" x 4" wood column for each one of the beams. However, Hsu's beam calculations were based on properties of a 5-2" x 12" built-up beam without any calculation to justify this design.

(c) Based on properties of 4-2" x 12" built-up beam, the city indicated that the first floor beams exceeded the OBC allowable stress by approximately 30 per cent in shear, even when the newly added columns were considered.

(d) The 4" x 4" wood columns and the specified 24" x 24" x 8" column foundation pads were both inadequately sized.

(e) The calculations for the built-up roof beams included columns that were required to reduce the 21'0" span, yet the corresponding drawing showed no such columns.

10. In set #2, Hsu provided no specific indications of the revisions in the respective revision blocks, where such should have been provided according to accepted engineering practice.

11. On June 5, 2001, Hsu made an amended submission to set #2 with sealed calculations, intending to address certain outstanding issues from the May 17, 2001 Examiner's Notice. These calculations again failed to completely address the foundation wall issue.

12. On June 11, 2001, the city received a third set of revised drawings numbered A1 to A3 dated May 2001 ("set #3") and calculations, all of them bearing Hsu's signed seal of the same date. In its review comments relative to set #3 and the further calculation, the city indicated that there continued to be structural deficiencies and design errors relevant to unit 431 as follows:

(a) While the drawings now reflected adequate floor beams with 5-2" x 12" (built-up but depicted as "laminated"), Hsu nevertheless provided this revision without reinforcement calculations or a detail indicating how the new 2" x 12" would be added to the existing 4-2" x 12" "laminated" beam to ensure the 5-2" x 12"

would carry the load rather than just the outer 2" x 12" added as reinforcement.

(b) Increases in the wood column and column pad sizes to 6" x 6" and 24" x 24" x 12" respectively (from 4" x 4" and 24" x 24" x 8" originally) were still inadequate.

(c) Upgrading of the built-up roof beams to 8-2" x 12" lacked the same design information with respect to reinforcement as that of the built-up floor beams.

13. In set #3, Hsu again omitted specific revisions in the respective revision blocks, contrary to accepted engineering practice.

14. On June 14, 2001, a meeting was held between the city and Hsu regarding the outstanding structural issue arising from the June 11, 2001 submission and the May 17, 2001 Examiner's Notice.

15. On June 18, 2001, the city received a fourth set of revised drawings numbered A1 to A3 dated May 2001 ("set #4") with supporting calculations. The drawings were sealed and signed on June 18, 2001 by Hsu; however, the supporting calculations were neither sealed nor signed. Typical floor beams A1 to A4, A6 and A7, each of which was to be reinforced with a 1-2" x 12" to create a 5-2" x 12" "laminated" beam still showed plies connected with screws in detail B-1. Hsu had not responded to the city's concerns about the adequacy of the reinforcing connection.

16. Set #4 also included a cross-section detail B-2 for the roof beams A5, A9 and A10 in unit 431. Each of the beams had 1-1.75" x 11.25" parallel strand lumber ("PSL") added on each face of the existing 4-2" x 12" beam ("laminated" or built-up) for reinforcement, to create a beam composed of two 1.75" x 11.25"s and four 2" x 12"s. The connection detail showed 1/2"-diameter bolts spaced at 64 mm adjacent to the ends and 1117 mm along the remainder of the beam. Among other revisions indicated in set #4, the columns were resized at 8" x 6" and the column pads correspondingly resized at 38" x 38" x 12".

17. Again in set #4, Hsu still did not indicate the revisions in the revision blocks, contrary to accepted engineering practice.

18. By letter dated June 27, 2001, the city advised Three Line of its review comments regarding set #4 as follows:

(a) Issues concerning the structural calculations, the soil condition and capacity of the foundation wall at section F1 were not fully addressed;

(b) The thickness of the column pads was inadequate for non-reinforced pads;

(c) The use of TJU PSL beams to reinforce the built-up beams was unacceptable based on the manufacturer's specifications. Because this use exceeded the product limitations, it was recommended that TJM be involved in the project for any use of its products;

(d) There were still deficiencies in the reinforcement of the 5-2" x 12" floor beams, and the PSL reinforced beams due to excessive spacing using 1/2"-diameter bolts;

(e) The north foundation wall appeared to be supported on disturbed soil. A confirmation that this footing was founded on undisturbed soil must be provided;

(f) The column size must match the width of the 5-2" x 12" floor beam.

19. PEO engaged an independent expert to review this matter and the expert prepared a written report concerning his conclusions.

20. The expert concluded that:

(a) Hsu issued four sets of sealed drawings to the city, each of which contained structural deficiencies, design errors and omissions;

(b) Even Hsu's fourth drawing submission, with calculations, was not in full compliance with the OBC;

(c) The four-ply "laminated" beam detail shown by Hsu was not designed in a manner that would enable it to be considered a full 7.5-inch thick member;

(d) Hsu submitted unsealed and unsigned calculations to the city;

(e) Hsu failed to identify his drawing revisions clearly;

(f) Hsu failed to maintain the standard that a reasonable and prudent practitioner would have maintained in the circumstances; and

(g) Hsu was not competent to perform the tasks that he undertook.

21. It appears that Hsu:

(a) issued four sets of sealed drawings to the city, all of which contained structural deficiencies, design errors and omissions;

(b) after four submissions to the city, Hsu's drawings and calculations still failed to comply with the requirements of the OBC;

(c) demonstrated a lack of knowledge with the OBC requirements by inappropriately relying on the city to provide advice for compliance and to identify structural deficiencies;

(d) showed a "laminated" beam detail in the drawings when he knew or ought to have known that it over-represented the as-built condition;

(e) breached section 53 of Regulation 941 made under the Act by submitting unsealed and unsigned final calculations to the city;

(f) failed to indicate any revisions in the revision blocks on all of the revised drawings, contrary to accepted engineering practice;
(g) failed to maintain the standard that a reasonable and prudent practitioner would have maintained in the circumstances;
(h) acted in an unprofessional manner; and
(i) is not competent in structural engineering relative to wood structures.

22. By reason of the facts set out above, it is agreed that Hsu is guilty of professional misconduct as defined in section 28(2)(b) of the Act as follows:

"28(2) A member of the Association or holder of a certificate of authorization, a temporary licence, a provisional licence or a limited licence may be found guilty of professional misconduct by the Committee if, …

(b) the member or holder has been guilty in the opinion of the Discipline Committee of professional misconduct as defined in the regulations."

23. By reason of the facts set out above, it is agreed that Hsu is guilty of incompetence as defined in section 28(3)(a) as follows:

"28(3) The Discipline Committee may find a member of the Association or holder of a temporary licence, a provisional licence or limited licence to be incompetent if in its opinion,

(a) The member or holder has displayed in his or her professional responsibilities a lack of knowledge, skill or judgment or disregard for the welfare of the public of a nature or to an extent that demonstrates the member or holder is unfit to carry out the responsibilities of a professional engineer."

24. The sections of Regulation 941 made under the Act relevant to the alleged professional misconduct are:
(a) *Section 72(2)(a)*: "Negligence";
(b) *Section 72(2)(b):* "Failure to make responsible provision for the safeguarding of life, health or property of a person who may be affected by the work for which the practitioner is responsible";
(c) *Section 72(2)(d)*: "Failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, by-laws and rules in connection with the work being undertaken by or under the responsibility of the practitioner";
(d) *Section 72(2)(g)*: "Breach of the Act or Regulations, other than an action that is solely a breach of the Code of Ethics";
(e) *Section 72(2)(h)*: "Undertaking work the practitioner is not competent to perform by virtue of the practitioner's training and experience";
(f) *Section 72(2)(j)*: (a) "Conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional," (in this case, "unprofessional" only).

Decision

The panel considered the Agreed Facts and found that the facts support a finding of professional misconduct and, in particular, found that Kwang-Ray Hsu, P.Eng., committed an act of professional misconduct as defined in section 28(2)(b) of the Act and as admitted by the member in paragraphs 20, 21, 22 and 24 of the Revised Notice of Hearing. Furthermore, the panel found that the facts support a finding of incompetence and accordingly found that Kwang-Ray Hsu, P.Eng., is incompetent as defined in section 28(3)(a) of the Act.

Reasons for Decision

The panel accepted the Agreed Facts on the basis that there was no difference of opinion between counsel for the association and counsel for the member. Counsel for Hsu admitted that the facts were substantially true and on the basis of these facts that all matters were agreed to. The panel found in particular that the facts set out in paragraphs 20(g) and 21 of the Revised Notice of Hearing supported the finding of incompetence. With respect to the panel's finding of professional misconduct, the panel found that the facts set out in paragraphs 20(f) and 21(f) of the Revised Notice of Hearing supported the finding of negligence, paragraphs 20(a) and 21(c) supported the finding with respect to section 72(2)(b) of the Act, paragraphs 20(b), 21(b), 21(c) supported the finding with respect to section 72(2)(d) of the Act, paragraph 21(e) supported the finding with respect to section 72(2)(g) of the Act, paragraphs 20(g), i.e. a failure to seal and sign, and 21(i) supported the finding for section 72(2)(h) of the Act, and that paragraph 21(h) and the totality of the circumstances supported the finding with respect to section 72(2)(j) of the Act.

Penalty

Counsel for the association advised the panel that a Joint Submission as to Penalty had been agreed upon. The Joint Submission as to Penalty recommended as follows:

(a) that Hsu receive a reprimand;

(b) that Hsu's licence to practise be suspended for a period of not less than six months and in any event until such time as Mr. Hsu:
  (i) writes and successfully passes the Professional Practice Examination (both parts),
  (ii) writes and passes examinations in advanced structural analysis and advanced structural design;

(c) notwithstanding the completion by Hsu of all of the examinations set out above, it shall nonetheless be a term and condition and limitation of Hsu's licence that he not deal in any way with the design or evaluation of wood structures;

(d) Hsu's suspension shall continue until the above terms and conditions are met, but in any event shall not continue for a period longer than two years (the maximum suspension under the Act). If Hsu fails to meet the above-noted conditions within a two-year period, he will at that time relinquish his licence to practise. In order to facilitate this eventuality if it becomes necessary, Hsu shall at this time provide an undertaking to withdraw from practice entirely, without the possibility of reapplying for licensure, if he does not successfully meet the terms of this penalty within a two-year period;

(e) whereas in view of Hsu's impecuniosity, PEO is not requiring payment of its costs in this case, it is specifically agreed between the parties that such costs, if sought, would be in an amount not less than $20,000.

Counsel for the association advised that the association was satisfied that the Joint Submission was fair and reasonable. Mr. Black referred to the November 1998 issue of *Gazette* noting that this was the second time that Kwang-Ray Hsu, P.Eng., had appeared before the Discipline Committee.

Independent legal counsel asked counsel for the parties to advise whether it was intended that the proposed reprimand be recorded on the Register. The panel was advised that that was the intention of the parties. The panel then requested that the parties provide the form of undertaking that Hsu intended to provide to PEO. As a result, an undertaking was filed (Exhibit #2) as follows:

"I, Kwang-Ray Hsu, hereby undertake to resign my licence with the Association of Professional Engineers of Ontario ("Association"), effective January 10, 2007, if I have not complied with all of the terms of the penalty order of the Discipline Panel made on January 10, 2005. I further undertake that subsequent to such resignation, I will not reapply for a licence with the Association.

Dated at Toronto, this 10th day of January, 2005."

Penalty Decision

The panel accepted the Joint Submission as to Penalty and accordingly ordered:

(a) that Hsu receive a reprimand and that the reprimand be recorded on the Register;

(b) that Hsu's licence to practise be suspended for a period of not less than six months and in any event until such time as Hsu:
- **(i) writes and successfully passes the Professional Practice Examination (both parts),**
- **(ii) writes and passes examinations in advanced structural analysis and advanced structural design;**

(c) notwithstanding the completion by Hsu of all of the examinations set out above, it shall nonetheless be a term and condition and limitation of Hsu's licence that he not deal in any way with the design or evaluation of wood structures;

(d) Hsu's suspension shall continue until the above terms and conditions are met, but in any event shall not continue for a period longer than two years (the maximum suspension under the Act).

If Hsu fails to meet the above-noted conditions within a two-year period, he will at that time relinquish his licence to practise. In order to facilitate this eventuality if it becomes necessary, the panel accepts the undertaking from Mr. Hsu as set out above (Exhibit #2).

(e) In view of Hsu's impecuniosity, and in view of the fact that the association is not requiring payment of its costs in this case, there will be no order as to costs.

The panel concluded that the proposed penalty is both reasonable and in the public interest. The member had fully cooperated with the association and has agreed to the facts. The panel viewed those allegations and the conduct of the member very seriously, especially in view of the fact that this was a second and very serious complaint.

The panel had serious reservations in accepting the joint proposal with respect to costs. It is the panel's view that under normal circumstances costs would be ordered. However, after consideration and advice from independent legal counsel on the fact that both Mr. Black and Mr. Sullivan had reached agreement on costs, the panel decided that there be no order relating to costs to be paid by the member.

In light of the panel's penalty decision, the panel's Decision and Reasons shall be published in the official publication of the association together with the name of the member pursuant to section 28(5) of the Act.

The written Decision and Reasons in this matter were dated February 11, 2005, and were signed by the Chair of the panel, Jim Lucey, P.Eng., on behalf of the other members of the panel: Santosh Gupta, P.Eng., Daniela Iliescu, P.Eng., Virendra Sahni, P.Eng., and Derek Wilson, P.Eng.

Summary of Decision and Reasons–Stipulated Order

In the matter of complaints regarding the conduct of:

Engineer A and Engineer B

members of the Association of Professional Engineers of Ontario.

The Complaints Committee in accordance with section 24 of the *Professional Engineers Act* (the "Act") referred complaints in the matters of Engineer A and Engineer B (the "members") to be dealt with by way of the Stipulated Order process.

In accordance with the Stipulated Order process, William Walker, P.Eng., a member of the Discipline Committee ("Discipline Committee member") of the Association of Professional Engineers of Ontario (the "association") was selected to represent the Discipline Committee for the disposition of these matters. After reviewing the complaints and other related information, the Discipline Committee member met with the members to allow them the opportunity to offer any explanations and/or defence for their actions and conduct.

The complaints alleged the following against the members:

1. In May 1998, a local city council approved a water supply system. The water supply plan was approved under the *Environmental Assessment Act* in December 1998.

2. In January 2001, a new council for the city passed a resolution authorizing Consulting Firm #1 to proceed with engineering studies and pre-design reports for an alternative water supply option. An addendum to the Environmental Study Report (ESR) was required under the *Environmental Assessment Act*.

3. In or about January 2001, the members volunteered their technical services to the city's proposed water committee. Engineer A was a retired professional engineer and acted with Engineer B as one of two "community resource members" to the water committee.

4. On February 5, 2001, the city requested that the water committee oversee the preparation of a design report for municipal water supply options. This report was to be used to support the addendum to the ESR.

5. Due to budgetary constraints, the ESR addendum was to be prepared by the city's engineering staff. Consulting Firm #2 and Consulting Firm #3 were hired to provide information to support the evaluation process in the ESR. Consulting Firm #1 developed updated cost figures for both water supply options.

6. The environmental assessment process that accompanies any change to a water system requires that alternative solutions be properly considered in terms of costs and environmental impacts and that the public be consulted in the evaluation. The water committee's mandate included the review of costs for each technical option and to report to the city.

7. The members were proponents of the alternative water supply option. In a letter to the editor that was published in the local newspaper on February 16, 2001, the members provided cost estimates and design recommendations regarding the water supply system.

8. Engineer A publicly commented on the work done by the consulting engineering firms, provided his review, and proposed his own technical design and solution.

9. On February 10, 2002, the members each wrote a letter to the city clerk, and asked that the letters be distributed to all members of city council. In the letters, the members expressed concern that a city councillor had brought up the issue that the members lacked the requisite experience to advise on communal water systems. Engineer A wrote that his "engineering experience has been in the design and maintenance of plant facilities in an industry that is far more complicated than a water system" and that he had "considerable hydraulic experience, with emphasis on pumping and piping." Engineer B wrote that "statements have impugned our professional reputations" and that "such statements have the potential to negatively impact upon my business interests." Engineer B further stated that volunteers such as himself only wished to "contribute their expertise" to the community.

Continued on page 33

Continued from page 32

10. In a February 12, 2002 article in a local newspaper, Engineer B publicly admitted that he had "not personally designed a water system for a municipality, but that he had experience reviewing "numerous conceptual and design reports prepared by consultants for municipal water treatment plants and related facilities." Engineer B also stated publicly that "Designing a water system is easy. Technologists can do it."

11. On March 8, 2002, Engineer A submitted his comparative cost estimates for the water supply options to another local newspaper. He also gave details of his experience and qualifications as a professional engineer.

12. In or about June 2002, Engineer A prepared a comparative flow sheet for the water supply options. He submitted these to the water committee with marked up notes on drawings prepared by Consulting Firm #1 and Consulting Firm #2.

13. In a memo to city council dated August 27, 2002, the members critiqued the cost estimates made by Consulting Firm #1. The members then proceeded to make their own design recommendations for the alternative water supply system, and provided design recommendations and the estimated costs for implementing those designs.

14. On September 16, 2002, Engineer A provided the chairman of the water committee with a report providing his professional opinion regarding the security of supply, reliability of existing municipal water supply equipment and processes, freeze protection requirements for city supply lines, contamination risks, and other issues.

15. On September 16, 2002, the members provided city council with a summary of the operating and maintenance cost estimates for the two water supply options.

16. In a memo to city council dated October 1, 2002, the members stated that they had a "philosophical difference" with Consulting Firm #1 as to the design for the water supply system.

17. On October 4, 2002, the manager of engineering for the city provided a design report with respect to the two water supply options. The report included the members' cost estimates for capital and operating costs, which varied significantly from those provided by Consulting Firm #1. The report stated that Consulting Firm #1 had concluded that the first option would cost $19,348 and that the alternative option would cost approximately $32,448. The first option would cost $82,000 per year less to operate than the alternative. Over 20 years, the present value of the alternative option was estimated to be $14.1 million more expensive than the first option. By comparison, the members had concluded that the first options would have a capital cost of $21,336 and that the alternative options would only have a capital cost of $23,345, based on their design proposal. According to the members, the first option would cost $450,000 per year more to operate than the alternative. Over 20 years, the members claimed that the present value of the alternative option was estimated to be $4.5 million less expensive than the first option. The members' estimates differed from those of Consulting Firm #1 by $18.6 million based on the present value of the options.

18. In a local newspaper article of October 23, 2002, Engineer A was quoted as saying that the consultants inflated the cost of the alternative option in order "to continuously promote" the first option and that the consultants "included the additional costs of equipment and inflated them." Engineer A was also quoted as admitting that he had never designed a municipal water supply system. The same edition of the paper included a letter from Engineer B alleging that the consultants' costs were excessive in order to favour the first water supply option.

19. In a January 13, 2003 presentation to city council, Engineer A recommended, and Engineer B supported, a design utilizing several miles of 24-inch diameter siphon pipes in order to obtain power savings. Engineer A presented a schematic of an unworkable siphoning arrangement that purported to siphon water from a nearby lake and up a mountain with a net suction rise of approximately 84 metres (275 feet). The siphon arrangement was part of the alternative water supply option recommended by the members.

20. On or about February 10, 2003, council decided to follow the advice of Consulting Firm #1, and to proceed with the first water supply option, contrary to the recommendations made by the members.

21. On or about February 13, 2003, the members stated publicly that they planned to file an environmental bump-up request to the government and that they opposed the first water supply option for the city.

22. The members continued to voice their opposition to council's decision. The members publicly and repeatedly criticized the analysis, conclusions and recommendations proposed by Consulting Firm #1. On or about May 30, 2003, Engineer B filed a bump-up request to the Ministry of the Environment.

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23. In a letter to the Minister of the Environment dated May 30, 2003, Engineer A referred to the ESR Addendum No. 3 as "one-sided whitewash" to favour the first water supply option and that the estimate by Consulting Firm #1 "was not up to the standard used in industry."

24. It was alleged that the members:
(a) publicly expressed opinions on professional engineering matters that were not founded on adequate knowledge;
(b) prepared technical designs and cost estimates relative to such designs in an incompetent manner;
(c) offered and provided services within the practice of professional engineering without a Certificate of Authorization, in breach of section 12(2) of the *Professional Engineers Act*;
(d) publicly made negative comments about the engineering profession that could reasonably be regarded by the engineering profession as derogatory; and
(e) acted in a disgraceful, dishonourable and unprofessional manner.

25. It was further alleged that Engineer A engaged in the practice of professional engineering after declaring to PEO that he was a retired member entitled to a fee remission.

26. It was also alleged that the members were therefore guilty of professional misconduct and/or incompetence as defined in the *Professional Engineers Act*, and breaches of the *Code of Ethics* as defined in Regulation 941.

The Discipline Committee member, in the meeting with the members, reminded them that this was their opportunity to offer an explanation and/or defense for their actions and conduct, and that if they did not accept the Stipulated Order, the matters would proceed to a full Discipline Hearing before a panel of the Discipline Committee.

The members, in providing an explanation, stated that:

1. They had been recruited by the city to sit on an advisory committee with respect to water supply options for the city, and particularly regarding studies and the preparation of a Class Environmental Assessment. Engineer A specifically stated that he had been recruited to oppose the staff recommendation of the first water supply option. Much of the discussion at the water committee centred on the two water supply options.

2. The members stated to the Discipline Committee member that, in their opinion, the professional engineers on the staff of the city had predetermined the outcome of the studies; that they had decided that the first water supply option was to be selected; that they had instructed the consultants retained by the city to bring in findings consistent with this direction; and that the consultants had complied with this request and biased their findings. Engineer A further indicated that in his opinion, the consultants retained by the city were not competent in estimating energy costs, and the manager of engineering had a hidden agenda with respect to the water supply options. Engineer A further stated that the manager of engineering and the consulting firms were in collusion with instructions to bring forward a predetermined outcome that they knew was not in the public interest.

3. The members stated that, based on studies they had completed, it was their opinion that the alternative water supply option was superior to the first option, and they made it their mission to have the recommendations of the consulting firms and the city staff reversed.

The Discipline Committee member considered the available information and the explanations of the members and found the following to be significant:

1. Although the members were appointed to the water committee initially as a community member and an engineering resource person to steer the studies and advise staff, they far exceeded that role. The members provided alternative designs to those prepared by the city's consultants, with detailed analyses, capital and operating cost estimates, and analysis and recommendations of degree of risk and redundancy.

2. The members were providing engineering services to a high level of detail. In all these engineering activities, the members worked in close cooperation and, in fact, represented to the water committee and the public that they were acting in concert.

3. The members held out publicly, in forums other than meetings of the water committee, that their designs, analysis and recommendations were superior to those provided by the city's consultants.

4. In a live telephone interview with a local radio station, Engineer B publicly accused the city's manager of engineering, who was a professional engineer, of telling half-truths and lies with respect to engineering issues for the water supply options.

5. In a letter to the editor published in a local newspaper, Engineer B implied that the city's administration and its consultants were involved in a conspiracy to obtain approval for a water supply option that was not in the public's best interest.

6. Engineer A presented a proposal to the city that included a siphon that clearly could not work. Under questioning during the interview, it

became apparent to the Discipline Committee member that Engineer A's knowledge of hydraulics was extremely limited. Engineer A acknowledged that he had never designed a water treatment plant.

7. Engineer A held himself out to have considerable expertise in cost estimating to the point where he publicly represented that his expertise in this area was greater than any of the project consultants retained by the city. However, when interviewed by the Discipline Committee member, he revealed that, for example, he estimated the electrical costs at water treatment plants by simply using 13 per cent of the total cost.

8. Although Engineer B had been a senior civil servant and taught water treatment to technology students, there was little evidence of his depth of training and experience as being sufficient to support the breadth and depth of the designs and analyses that he presented to the water committee and to the public.

Based upon the foregoing, the parties have agreed that there is a basis to believe that the members would be found guilty of professional misconduct and had breached sections of Ontario Regulation 941, specifically:

(a) Section 72(2)(j): conduct or act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional;

(b) *Section 77(2)(iii)*: a practitioner shall … not express publicly, or while the practitioner is a witness before a court, commission or other tribunal, opinions on professional engineering matters that are not founded on adequate knowledge and honest conviction;

(c) *Section 77(7)(i)*: a practitioner shall … act towards other practitioners with courtesy and good faith;

(d) *Section 77(7)(iii)*: a practitioner shall … not maliciously injure the reputation of another practitioner.

The Discipline Committee member, after careful review of all the provided information, has offered, and the members have agreed to, the following Stipulated Order:

1. that the members be reprimanded for their behaviour in this matter; and

2. that the Stipulated Order and Reasons be published in summary but without reference to names or identifying details.

The Decision and Reasons documents were dated November 4, 2004 and were signed by the Discipline Committee member, William Walker, P.Eng. The Stipulated Order document for Engineer A was dated March 12, 2005 and was signed by William Walker, P.Eng., and Engineer A. The Stipulated Order document for Engineer B was also dated March 12, 2005 and was signed by William Walker, P.Eng., and Engineer B.

Decision and Reasons

In the matter of a discipline hearing under the *Professional Engineers Act* and in the matter of a complaint regarding the conduct of:

A Member

of the Association of Professional Engineers of Ontario.

This matter came on for hearing before a panel of the Discipline Committee on Wednesday, July 7, 2004 at the Association of Professional Engineers of Ontario (the "association") in Toronto. The association and the member were each represented by legal counsel.

The Allegations

In a Notice of Hearing dated April 1, 2004 (Exhibit #1) it was alleged that the member was guilty of professional misconduct as defined in Regulation 941.

Agreed Facts

Counsel for the association advised the panel that agreement had been reached on the facts and introduced an Agreed Statement of Facts that provided as follows:

1. The member was at all material times a member of the Association of Professional Engineers of Ontario.

2. In or about July 2001, the owner of two properties in Toronto, Ontario (the "owner"), retained

the member and his firm to prepare a site plan and act as agent with respect to a proposed severance of the properties.

3. The member's firm did not hold a Certificate of Authorization ("C of A") issued by the association permitting it to offer and provide professional engineering services to the public. In early 1990, the association had issued a C of A to a corporation owned by the member. In February 1995, the Government of Ontario cancelled the Certificate of Incorporation for that firm and dissolved the corporation for default in complying with the *Corporations Tax Act*. The member did not advise the association that the corporation had been dissolved. According to Government of Ontario records, the member's current firm was never incorporated.

4. On or about July 16, 2001, the member and his firm issued a site plan drawing with respect to the proposed severance.

5. On or about September 11, 2001, the member signed a "Declaration of Posting of Sign" (the "declaration") with respect to signs provided to the member by the City of Toronto Committee of Adjustment (the "committee"). The declaration stated that the signs were posted in accordance with the committee's instructions as soon as they were received. The signs stated the purpose of the severance application, in addition to the date and time of the public hearing. The member had not, in fact, posted the signs.

6. At a hearing on September 11, 2001, the committee conditionally approved the application for severance and issued its Notice of Decision on September 14, 2001.

7. On or about October 2, 2001, the fact of the severance application and the committee approval came to the attention of the owner of a neighbouring property (the "neighbour"). The neighbour telephoned the secretary and assistant manager for the committee and reported that she had received no notification about the hearing and that signs had not been posted in advance of the hearing.

8. On or about October 4, 2001, the approval of the severance application was made null and void because of the lack of notification to the neighbour, and because of the false declaration signed by the member. The lack of notification was determined to be a clerical error on the part of the city. The member had assumed that the owner had posted the signs, but failed to confirm this fact prior to signing and submitting the declaration.

9. The committee subsequently issued a Public Hearing Notice to the neighbour, among others, regarding the application for severance. Included with the notice was a revised site plan drawing, issued by the member and his firm.

10. It is alleged that the member:
(a) breached section 12(2) of the *Professional Engineers Act* by offering and providing services within the practice of professional engineering without holding a valid Certificate of Authorization;
(b) breached section 50 of Regulation 941 made under the *Professional Engineers Act* by failing to give written notice to the Registrar regarding the dissolution of his prior incorporated business;
(c) signed and submitted a "Declaration of Posting of Sign" that he ought to have known was false; and
(d) acted in an unprofessional manner.

11. By reason of the facts aforesaid, it was alleged that the member was guilty of professional misconduct as defined in section 28(2)(b) of the *Professional Engineers Act*, R.S.O. 1990, Chapter P.28:
(a) *Section 72(2)(a)*: negligence as defined at Section 72(1);
(b) *Section 72(2)(b)*: failure to make reasonable provision for the safeguarding of life, health or property of a person who may be affected by the work for which the practitioner is responsible;
(c) *Section 72(2)(d)*: failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, by-laws and rules in connection with work being undertaken by or under the responsibility of a practitioner;
(d) *Section 72(2)(g)*: breach of the Act or regulations, other than an action that is solely a breach of the code of ethics; and
(e) *Section 72(2)(j)*: conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional.

Plea by Member

The member admitted the allegations as set out in the Agreed Statement of Facts. The panel conducted a plea inquiry and was satisfied that the admission was voluntary, informed and unequivocal.

Decision and Reasons for Decision

The panel considered the Agreed Statement of Facts and found that the facts supported a finding of professional misconduct and, in particular, found that the member committed an act of professional misconduct as admitted.

The panel accepted the Agreed Facts on the basis that there was no difference of opinion between counsel for the association and counsel for the member.

Penalty

Counsel for the association advised the panel that a Joint Submission as to Penalty had been prepared. The jointly submitted penalty included a reprimand, a requirement to pass the Professional Practice Examination and an award of costs to the association. Counsel for the association indicated that the association was satisfied that the Joint Submission was fair and reasonable.

Counsel for the member stated that the member was in agreement with the allegations made by the association. He advised the panel that the member regretted what had taken place and that there had been no deceitful intent. He noted that the member had maintained payment of his fees at all times and that the failure to advise the association about the dissolution of the prior corporation was simply an oversight. He also advised that the member, while submitting his severance documentation, was asked to sign the declaration as a formality. He said that the member had made an honest mistake and had admitted that an error in judgment had taken place.

Counsel for the member stated that the member wished to put this whole matter behind him immediately and that there was nothing to be gained by publishing names.

Penalty Decision

The panel completed their deliberations and accepted the Joint Submission as to Penalty. Consequently the panel ordered that:

(a) the member will be required to write and pass the Professional Practice Examination within 12 months of July 7, 2004, failing which his licence would be suspended for three months;

(b) the member will receive a reprimand to be recorded on the association's Register for 12 months; and

(c) the member will pay to the association costs of $2,000 within six months of July 7, 2004.

The panel concluded that the proposed penalty was reasonable and in the public interest. The member had fully cooperated with the association, agreed to the facts and recognized that an error in judgment had been made. The panel therefore decided not to order the publication of the member's name.

The panel would like to highlight two important issues arising from this case: First, the C of A carries with it a professional status and responsibility of not only engineering competence, but also a reasonable competence in administration and management. Although it is recognized that in a small business the owners are required to wear "many hats," these non-engineering activities must not be done haphazardly. Failure to attend to the business can cause problems that reflect on the professionalism of engineers.

Second, the signature of a professional engineer also carries with it a certain moral and legal accountability. Engineers are often in a position of representing clients as they submit drawings, specifications, forms, etc. to various authorities. In some cases, forms are thrust upon the engineer and they are requested to sign them as a "formality" and/or for "expedience's sake." However, it is the signing engineer who is held accountable and who must confirm that the conditions of the document have been fulfilled and that all statements are accurate.

The Decision and Reasons were signed on January 24, 2005 by the Chair of the Discipline Panel, Edward Rohacek, P.Eng., on behalf of the members of the panel: Colin Cantlie, P.Eng., Diane Freeman, P.Eng., Lawrence McCall, P.Eng., and Derek Wilson, P.Eng.

Notices of Licence Suspension

At the conclusion of a discipline hearing held from May 24 through May 27, 2005, a panel of the Discipline Committee ordered that the licence of **Vinodbhai Patel, P.Eng.**, be suspended for a period of one month, effective May 27, 2005. A summary of the Decision and Reasons of the Discipline Committee will be published in due course.

At a discipline hearing held on June 7, 2005, a panel of the Discipline Committee found **Nicholas M. Upton, P.Eng.,** guilty of professional misconduct and subsequently ordered that his licence be suspended for a period of three months. Mr. Upton waived his right of appeal in this matter and hence the licence suspension took effect on that date. A summary of the Decision and Reasons of the Discipline Committee will be published in due course.

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Toronto Man Jailed 30 Days for Repeated Violations of *Professional Engineers Act*

Mohammad Hafeez, of Toronto, was jailed June 10, 2005 for 30 days and ordered to pay costs to Professional Engineers Ontario (PEO) of $19,863.81, after he was found in contempt of a previous Order of the Ontario Superior Court of Justice for violating the *Professional Engineers Act*. The previous Order was made by the Honourable Justice Trafford on November 7, 1995.

Mr. Hafeez is not, and has never been, licensed as a professional engineer in the Province of Ontario.

The Honourable Madam Justice Sachs handed down the sentence in the Ontario Superior Court of Justice at 361 University Avenue, in Toronto. Madame Justice Sachs reviewed affidavit evidence on behalf of the application by PEO's lawyers, McCarthy Tétrault, and heard evidence from Mr. Hafeez in person. She also heard submissions from Mark Polley, of the law firm of McCarthy Tétrault, on behalf of PEO and A.S. Leighl on behalf of Mr. Hafeez.

The application was brought after an investigation by PEO revealed that in the spring of 2000, Mr. Hafeez had described himself as a "structural engineer" and an "engineer" to clients and another person while working on a construction project in the City of Toronto. Under the terms of the 1995 Order, Mr. Hafeez was ordered to:

- refrain from using the title "professional engineer" or an abbreviation or variation thereof as an occupational or business designation;
- refrain from using a term, title or description that will lead to the belief that he may engage in the business of professional engineering; and
- surrender to PEO any business cards, site signs, seals or title blocks in his possession containing the words "professional engineer," "engineer," "engineering," or any abbreviation thereof.

The Court also heard that Mr. Hafeez had previously been convicted on four separate occasions of misrepresenting himself as "an engineer" while working on various projects in the Greater Toronto Area between April 1993 and June 1998. Fines were levied in the combined total of $85,000.

Summary of Scheduled Discipline Hearings

This schedule is subject to change without public notice. For further information contact PEO at 416-224-1100; toll free 800-339-3716.

Any person wishing to attend a hearing should contact the complaints and discipline coordinator at extension 1072.

All hearings commence at 9:30 a.m.

NOTE: These are allegations only. It is PEO's burden to prove these allegations during the discipline hearing. No adverse inference regarding the status, qualifications or character of the member or Certificate of Authorization holder should be made based on the allegations listed herein.

October 4-5, 2005

David W. Seberras, P.Eng.

It is alleged that Seberras is guilty of incompetence as defined in section 28(3)(a) of the *Professional Engineers Act*. It is alleged that Seberras is guilty of professional misconduct as defined in section 28(2)(b) of the *Professional Engineers Act*. The sections of Regulation 941 made under the Act relevant to the alleged professional misconduct are:

(a) *Section 72(2)(a)*: negligence;
(b) *Section 72(2)(b)*: failure to make reasonable provision for the safeguarding of life, health or property of a person who may be affected by the work for which the practitioner is responsible;
(c) *Section 72(2)(d)*: failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, by-laws and rules in connection with work being undertaken by or under the responsibility of the practitioner;
(d) *Section 72(2)(h)*: undertaking work the practitioner is not competent to perform by virtue of the practitioner's training and experience; and
(e) *Section 72(2)(j)*: conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional.