# DISCIPLINARY INVESTIGATING COMMITTEE DECISION COMPLAINT ABOUT ZHENG WU

### FOR PUBLICATION

### In accordance with:

Chartered Professional Engineers of New Zealand Act 2002 Chartered Professional Engineers of New Zealand Rules (No 2) 2002 Engineering New Zealand Rules Engineering New Zealand Disciplinary Regulations 2017

### Prepared by

Jenny Culliford FEngNZ (Ret.)

Chair of Disciplinary Committee

Kelvin Walls FEngNZ (Ret.)
Gordon Hughes FEngNZ CPEng
Anita Killeen, Barrister & Solicitor of the High Court of New Zealand
Hamish Wilson, nominated by Consumer NZ
Members of the Disciplinary Committee

30 September 2022



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# SUMMARY

- 1. In June 2019, Dr Zheng Wu CMEngNZ CPEng IntPE(NZ), Director of Sinotek Engineering Limited, designed and oversaw the construction of earthquake remedial works at a residential property he owned. Dr Wu then listed the Property for sale through a real estate agency.
- 2. The complainants were potential purchasers of the Property. However, they withdrew their offer to purchase the Property after receiving a report which raised concerns about the adequacy of the earthquake remedial works undertaken.
- 3. The complainants complained to Engineering New Zealand about the standard of the remedial and strengthening works designed by Dr Wu and carried out under a discretionary building consent exemption. The complainants also complained about Dr Wu's actions in not disclosing his identity as the owner of the property when he applied for his design plans to be exempted from the building consent process.
- 4. Dr Wu admitted that:
  - a. the lack of documentation of his inspections fell below the standard of normal practice;
  - b. he ought to have obtained an independent geotechnical report for the project;
  - c. he should have documented his own geotechnical assessment which he carried out on the Property;
  - d. there were differences between the Sinotek engineering work specified and the works completed;
  - e. there were opportunities for him to have showed a higher level of professional conduct in respect of the alleged defects;
  - his interest as the homeowner and vendor, and his role as the Chartered Professional Engineer responsible for the design and construction monitoring of the project, resulted in a conflict of interest; and
  - g. he failed to adequately disclose and appropriately manage his conflict of interest to potential third party buyers.
- 5. Dr Wu further admitted these admitted facts establish grounds of discipline under section 21(1)(b) of the Chartered Professional Engineers of New Zealand Act 2002 (the **CPEng Act**) and clause 17 of the Engineering New Zealand Disciplinary Regulations 2017.
- 6. The parties agreed this matter could proceed straight to penalty.

### **DECISION**

- Having considered the matter, we have found that Dr Wu has not acted in accordance with the standard expected of a Chartered Member of Engineering New Zealand and a Chartered Professional Engineer.
- 8. The complaint is upheld.
- 9. In exercising our delegated powers, we order that Dr Wu:
  - must undertake professional development in:
    - technical considerations relating to post-earthquake repair of residential properties (at least eight hours), and

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professional practice and ethics (at least eight hours).

The above professional development must be completed to the satisfaction of the Chair of the Disciplinary Committee. If Dr Wu does not complete the above professional development by 30 April 2023 (being six months from the date of this decision), his membership of Engineering New Zealand will be suspended for six months effective 1 May 2023 days.

- is censured, pursuant to section 22(1)(c) of the CPEng Act;
- pay a fine of \$2,500, pursuant to section 22(1)(d) of the CPEng Act; and
- pay 50% of the costs incurred by Engineering New Zealand in investigating this matter, being \$7,700 plus GST, pursuant to section 22(4) of the CPEng Act.
- 10. In addition, the Registration Authority will:
  - notify the Registrar of Licensed Building Practitioners appointed under the Building Act 2004 of the order and the reasons for it; and
  - publish and name Dr Wu in our final decision of this complaint on its website, in a public press release, and in any other communication it considers appropriate.

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# **BACKGROUND**

### THE COMPLAINT

- 11. Dr Zheng Wu CPEng CMEngNZ IntPE(NZ) is a Chartered Professional Engineer<sup>1</sup>, Chartered Member of Engineering New Zealand<sup>2</sup>, and director of Sinotek Engineering Limited (Sinotek).
- 12. Dr Wu purchased the Property on 9 November 2018. He carried out his investigation and, on behalf of Sinotek, prepared a structural engineering design based on his assessment of the existing structural damage as a result of the Canterbury Earthquake Sequence.
- 13. On 26 November 2018, Dr Wu applied to the Christchurch City Council (the **Council**) for his design plans to be exempted from building consent, under schedule 1, clause 2(a) of the Building Act 2004 (**Exemption Application**).<sup>3</sup>
- 14. On 28 November 2018, the Council approved Dr Wu's Exemption Application, containing his remedial design. Dr Wu arranged for the repairs to be undertaken by a building company. Dr Wu issued a Producer Statement (the **PS4**)<sup>4</sup> on 10 March 2019, confirming completion of the works.
- 15. In April 2019, or thereabouts, Dr Wu listed the Property for sale through a real estate agency. The complainants were potential purchasers of the Property. They signed a conditional sale agreement on 30 May 2019 but withdrew their offer to purchase the Property after receiving a report (the Cavity Critter Report) <sup>5</sup> which raised concerns about the adequacy of the earthquake remedial works undertaken at the Property.
- 16. In June 2019, the complainants complained to Engineering New Zealand about the standard of remedial works Dr Wu had designed and the construction of which he had overseen at the Property. Specifically:
  - a. the adequacy of the earthquake remedial works undertaken at the Property; and
  - b. the extent of Dr Wu's disclosure of his personal interest in the Property when he applied for the remedial works to be exempted from the building consent process..

### **INITIAL INVESTIGATION**

- 17. Engineering New Zealand put the complainants' concerns to Dr Wu on 16 July 2019. Dr Wu provided an initial response on 12 August 2019.
- 18. On 7 October 2020, a Chair of Investigating Committees was appointed as Adjudicator.
- 19. On 7 May 2021, after considering the matter, the Adjudicator referred the matter to an investigating committee on the basis there were no grounds to dismiss the complaint.

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 $<sup>^{\</sup>mathrm{1}}$  Dr Wu was first registered as a chartered professional engineer on 12 August 2014.

<sup>&</sup>lt;sup>2</sup> Dr Wu became a Chartered Member of Engineering New Zealand on 29 May 2013.

<sup>&</sup>lt;sup>3</sup> The section applies to "Any building work in respect of which the territorial authority or regional authority considers that a building consent is not necessary for the purposes of this Act because the authority considers that the completed building work is likely to comply with the building code."

<sup>&</sup>lt;sup>4</sup> When construction monitoring is undertaken, a Producer Statement – Construction review (PS4) may be issued by a Chartered Professional Engineer. The PS4 is a statement of opinion based on reasonable and stated grounds that certain aspects of the building work have been completed according to the building consent and amendments.

<sup>&</sup>lt;sup>5</sup> An inspection company which provides for a "Cavity Critter" machine to enter and photograph subfloor spaces and internal foundations.

### **INVESTIGATING COMMITTEE**

- 20. On 28 June 2021, an investigating committee was appointed to consider the complaint.
- 21. The Investigating Committee considered there were no grounds to dismiss the complaint and, accordingly, determined on 9 November 2021 it should be referred to a disciplinary committee.
- 22. The Investigating Committee was of the view that by failing to disclose his personal and financial interest in the property, Dr Wu may have breached his ethical obligation to disclose and appropriately manage conflicts of interest.
- 23. With respect to the content and quality of Dr Wu's work, the Investigating Committee stated that their primary concerns related to:
  - a. the discrepancies in the number and timing of inspections intended by the approved documentation, and which were recorded to have been undertaken by Dr Wu;
  - b. there being no confirmation of the requirement specified by Dr Wu that the ground bearing was checked and approved before the concrete was poured; and
  - c. the apparent shortfalls in the workmanship evidenced by the Cavity Critter report, that were apparently observed as acceptable by Dr Wu when he undertook his inspection on 23 February 2019, prior to issuing a PS4.

# **DISCIPLINARY COMMITTEE**

- 24. On 27 October 2021, a disciplinary committee was appointed to consider the complaint.
- 25. The members of the Disciplinary Committee are:

Jenny Culliford FEngNZ (Ret.) (Chair)
Gordon Hughes FEngNZ CPEng IntPE(NZ)
Kelvin Walls FEngNZ (Ret.)
Hamish Wilson, nominated by Consumer New Zealand
Anita Killeen, Barrister of the High Court of New Zealand

26. Dr Wu is both a Chartered Professional Engineer and a Chartered Member of Engineering New Zealand. Accordingly, our role is to consider the information before us relative to the Chartered Professional Engineers of New Zealand Act 2002 (the CPEng Act) and the Chartered Professional Engineers of New Zealand Rules (No 2) 2002 (the CPEng Rules), and the Engineering New Zealand Rules, Engineering New Zealand Disciplinary Regulations 2017 (the Regulations), and the Code of Ethical Conduct.

### **AGREED SUMMARY OF FACTS**

- 27. On 3 March 2022 counsel for Dr Wu filed an Agreed Summary of Facts.
- 28. Among other matters, Dr Wu admitted:
  - a. the lack of documentation of his inspections fell below the standard of normal practice;
  - b. he ought to have obtained an independent geotechnical report for the project;
  - c. he should have documented his own geotechnical assessment which he carried out on the property;

- d. there were differences between the Sinotek engineering work specified and the works completed; and
- e. there were opportunities for him to have showed a higher level of professional conduct in respect of the alleged defects.
- 29. The Summary of Facts further states that Dr Wu admits that his interest as the homeowner and vendor and his role as the Chartered Professional Engineer responsible for the design and construction monitoring of the project resulted in a conflict of interest. Dr Wu admits he failed to adequately disclose and appropriately manage his conflict of interest to potential third party buyers.
- 30. Dr Wu further admits these facts establish grounds for discipline under section 21(1)(b) of the CPEng Act and clause 17 of the Regulations.
- 31. On 30 March 2022, we wrote to the parties advising that the Committee agreed there were grounds for discipline and proposed to dispense with a hearing. The parties were invited, should they have no objection to the process proposed by the Committee, to make submissions on the appropriate disciplinary sanction, allocation of costs and publication.

## AGREED FACTS

32. The following facts are agreed by the parties.

### **EXEMPTION APPLICATION**

- 33. Under Schedule 1, clause 2(a) of the Building Act 2004, territorial authorities or regional authorities can use their discretion to exempt any proposed work from the requirement to obtain a building consent if:
  - a. the completed building work is likely to comply with the Building Code; or
  - b. if the completed building work does not comply with the Building Code, it is unlikely to endanger people or any building, whether on the same land or on another property.
- 34. In doing this, they and the resulting public record are reliant on assessments and certificates prepared by qualified practitioners.
- 35. The Exemption Application submitted by Dr Wu attached plans of the proposed repair works together with supporting documentation including a memorandum from a Licensed Building Practitioner; a Producer Statement Design (**PS1**)<sup>6</sup> issued by Dr Wu on 26 November 2018; an Inspection Schedule; a Drawing Set of structural plans with annotated specifications titled "*Proposed repair works for residential dwelling*" dated 25 November 2018; a Structural Inspection report; and specifications.

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<sup>&</sup>lt;sup>6</sup> A PS1 is a statement from the design engineer that they believe on reasonable grounds that their design complies with the Building Code. Their intent is to signal to the building consent authority that certain design work has been done (or overseen/supervised) by a practitioner who is competent to perform the defined work (most usually, a Chartered Professional Engineer). The PS1 has no legal status under the Building Act 2004 nor the Building Code but is commonly part of the package of information a consent authority will consider when deciding whether to issue a building consent.

### **INVESTIGATIONS AND DESIGN**

- 36. On 26 November 2018, Dr Wu, on behalf of Sinotek, signed and issued a structural inspection report for the Property, outlining the investigations undertaken by Dr Wu and the recommendations for the structural design.
- 37. The report classifies the Property as a B1 type construction and the site as "Green Zone, Technical Category 2 (TC2), yellow" area.<sup>7</sup>
- 38. The report states Dr Wu carried out a "visual inspection to the interior and exterior of the building to determine the structural damage caused by the earthquakes since September 2010 to the inspection date".
- 39. The report states that no site-specific geotechnical investigation was undertaken as part of the assessment. Dr Wu says that he carried out hand auger and Scala penetrometer tests on the site soils for his own satisfaction. We requested this information from Dr Wu. Dr Wu has not provided a record of these tests. MBIE guidance for TC2 sites includes a requirement for geotechnical investigations to be undertaken or reported upon.
- 40. The report concluded the Property had:
  - a. Minor to moderate structural damage to the building's exterior and interior and some floor differential settlement;
  - b. No evident structural crack was identified on the external cladding; and
  - c. No evident tilting of the piles.
- 41. The repairs recommended to "ensure its sufficient/adequate structural integrity" were:
  - re-levelling of the house in accordance with the MBIE Guidance by mechanical jacking and packing;
  - b. replacement of damaged piles;
  - c. repairing the concrete perimeter footing in accordance with New Zealand Standard 23602:2003;
  - d. repairing the GIB in accordance with the GIB repair manual; and
  - e. plastering and painting inside as needed.

### **DOCUMENTATION OF INSPECTIONS**

- 42. When issuing building consents, building consent authorities may require an engineer to monitor construction of the building works. Construction monitoring is an independent method of verifying the building works, or in most cases a portion of the works, have been completed in accordance with specified requirements.
- 43. The PS1 issued by Dr Wu nominated the CM2 level of construction monitoring. At CM2 a sample of each important work procedure, material of construction and component is reviewed for compliance with the plans and specifications and a representative sample of each important completed work is reviewed prior to enclosure of completion. The inspection schedule included in the Exemption Application, noted inspections were to take place before the work commenced and then a "final inspection" and a PS4 supplied following satisfactory completion of the works.

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<sup>&</sup>lt;sup>7</sup> In accordance with Canterbury Earthquake Recovery Authority (CERA).

- 44. Dr Wu issued a PS4 on 10 March 2019 confirming completion of the remedial works in accordance with the Sinotek report and plans submitted to the Council with the Exemption Application. The PS4 was provided to the Council together with an inspection report prepared Dr Wu dated 23 February 2019, and a Producer Statement Construction (PS3)<sup>8</sup> dated 12 December 2018 issued by a contractor engaged to carry out the building work.
- 45. The documentation Dr Wu submitted with the PS4 recorded one inspection had been carried out by Dr Wu on 23 February 2019, approximately nine weeks after the PS3 dated 12 December 2018 was issued. Dr Wu made no record of any further inspections.

### ISSUES RAISED POST-REMEDIAL WORK

- 46. On 7 June 2019, Cavity Critter undertook an inspection of the subfloor of the Property and issued a report for the complainants. The Cavity Critter Report included a series of photographs of the Property's subfloor and foundations and raised a number of structural and non-structural concerns about the state of the Property's subfloor following Dr Wu's remedial works.
- 47. The key concerns raised in the Cavity Critter Report were:
  - Much of the subfloor's timber had terminal borer and rot and should have been replaced in the repairs;
  - b. The foundations were poor quality "type B" foundations;
  - A new H1.2 treated joist had been inserted. The Report stated this timber has been used for most of the new subfloor framing and was not recommended in the Building Code;
  - d. The home was not properly insulated. Further, the left-over timber had been left in the subfloor and this was not recommended as it encourages borer;
  - e. Newly treated timber piles had been concreted in incorrectly. The Report observed the concrete was flat and could trap water rather than letting it flow away from the pile as stipulated in the Building Code;
  - f. The original piles were concrete poured in jerry cans. The original piles were still required because they support the bearer joints and load points. However, the concrete was the same poor quality as the foundations, and they were not suitable for packing off;
  - g. The packers were treated and fixed, but no effort had been made to connect the jerry can pile to the bearer as required;
  - h. Regarding the ring foundations, some brackets were lacking the top bolt into the original ring foundation plate, rendering them pointless. In addition, the ring foundation also had cracking. The Report noted that "it would be almost impossible to repair this foundation anyway due to the quality of the concrete".
- 48. The complainants provided a copy of the Cavity Critter Report to the Council and withdrew their offer to purchase the Property.
- 49. On 13 June 2019, a representative of the Council emailed Dr Wu regarding the claims made in the Cavity Critter Report. The Council said:

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<sup>&</sup>lt;sup>8</sup> The contractor who has carried out the building work issues a PS3 to confirm that the building work is in accordance with the consent plans and Building Code.

We have received a third-party report (attached) for the dwelling  $\dots$  which raises some concerns about the quality of building work carried out, some of which appears was done under a discretionary exemption  $-\dots$ 

The report raises concerns around the workmanship and raises concerns around the alleged use of inappropriately treated timber in locations that raise concerns in relation to compliance with NZ Building Code Clause B2 Durability.

- 50. On 14 June 2019 Dr Wu, in collaboration with the contractor, responded to the Council's concerns. Dr Wu disagreed with the Report's general comments about the property's foundations, including that they were poor quality. Dr Wu also disagreed with the criticisms about the overall quality of the timber strength. Dr Wu told the Council some of the H1.2 treated timber was there prior to the repairs (from earlier remedial works), and some of the H1.2 timber was not supporting anything. Dr Wu said "to rectify, all the less treated timber will be removed. For those structural timber elements, replacement will be installed with H3.2 (min.) treated".
- 51. In responding to the Council, Dr Wu also said:

From the outside surface of the perimeter footing, only a few cracks were found with small crackwidth [sic] before the repair. If the perimeter footing is really weak it would have a lot cracks after suffered the major earthquakes [sic]. It shows the perimeter footing concrete is hard and repairable.

- 52. Dr Wu also said the connection was not required for the jerry can piles as they had since been made redundant and new piles had been inserted. He said the packer was there temporarily for construction, but he would "double check and rectify accordingly".
- 53. Regarding the absence of a connection supporting the bearer joint, Dr Wu said he would double check and install the connection if required.
- 54. Regarding the ring foundation, Dr Wu said "[f]rom the firm holding of the bolts, it is repairable.

  Crack will be repaired in accordance with MBIE guidance."
- 55. Dr Wu also said the construction waste in the subfloor would be cleared, and he would install damp proof membrane for the whole floor to improve the subfloor condition.

### NON-DISCLOSURE OF INTEREST

- 56. Neither the Council nor potential purchasers of the Property were informed of, or could readily identify, Dr Wu's interest in the Property. As the owner, Dr Wu engaged Sinotek to undertake the design and construction monitoring of the remedial works to the Property, work he himself undertook. As a Chartered Professional Engineer, Dr Wu signed off the PS1 and PS4.
- 57. The Sales Brochure given to potential purchasers enclosed documentation associated with the remedial works undertaken under the Exemption.
- 58. The Sales Brochure included:
  - a. A letter from Sinotek dated 10 March 2019 addressed to the Council and signed by Dr Wu, which enclosed the PS4, PS3 and an inspection report dated 23 February 2019;
  - b. A letter from the Council's building consent processor dated 28 November 2018 advising Sinotek of their acceptance of the Exemption Application;
  - c. A covering letter from Sinotek dated 26 November 2018 signed by Dr Wu enclosing the Structural Plans and supporting documents, specifically, the Structural Design report, memorandum from Licensed Building Practitioner, PS1 and Inspection Schedule, structural site inspection report and specifications.

59. Dr Wu's identity as the client was only shown on the inspection schedule (provided with the PS1) and in the title block at the foot of the structural plans submitted as part of the Exemption Application. Regarding the rest of the documentation, the identity of the client was either left blank or had been redacted from the Sales Brochure. Although Dr Wu is not responsible for the document, the owner's details were similarly left blank in the PS3 signed by the contractor.

# DISCUSSION

### **ROLE OF THE DISCIPLINARY COMMITTEE**

- 60. Professional disciplinary processes primarily exist to protect the public, uphold professional standards, and maintain public confidence in the profession and its regulation. They do this by ensuring that members of the profession adhere to certain universal (or accepted) professional standards.<sup>9</sup>
- 61. The role of the Disciplinary Committee in this professional disciplinary process is to determine whether Dr Wu has acted in accordance with accepted professional standards and, if not, whether there are grounds for disciplining him in accordance with the CPEng Act, the Engineering New Zealand Rules, and the Regulations.

### THE LEGAL TEST

- 62. The legal test to assess whether Dr Wu acted in accordance with acceptable professional standards is whether he acted in accordance with what a reasonable body of his peers would have done in the same situation.
- 63. The assessment of whether an engineer has acted in accordance with accepted standards may be informed by whether reasonable members of the public would "consider such an act or omission, if acceptable to the profession, were to lower the standard of that profession in the eyes of the public".<sup>10</sup>
- 64. If the evidence is that Dr Wu acted in accordance with accepted standards, then we will dismiss the complaint. If the evidence is that Dr Wu did not act in accordance with accepted standards, then we will uphold the complaint. If the behaviour meets the latter criterion, we must consider whether the conduct "falls seriously short of accepted conduct" before imposing a disciplinary sanction.<sup>11</sup>
- 65. Our approach to this question has been to consider the Agreed Summary of Facts, and the analysis and findings of the Investigating Committee and the information that formed the basis of their decision.

### **ANALYSIS**

### Inspections

66. In the Agreed Facts, Dr Wu admits that the documentation of his inspections fell below the standard of normal practice. He further admits there were differences between the Sinotek

<sup>&</sup>lt;sup>9</sup> Dentice v Valuers Registration Board [1992] 1 NZLR 720 (HC).

<sup>&</sup>lt;sup>10</sup> Robinson v RA (10 July 2015, Appeal Ruling #21) Chartered Professional Engineers Council. Available at: http://www.cpec.org.nz/appeal-rulings/appeal-21-10-july-2015-robinson-v-ra.

<sup>11</sup> Ibid.

- Engineering work specified and the works completed and that there were there were opportunities for him to have showed a higher level of professional conduct in respect of the works completed.
- 67. As noted in the Engineering New Zealand Guidelines: Construction Monitoring Services (2014), it is important that engineers are involved during the construction phase to ensure the design is being correctly interpreted, the construction techniques are appropriate and do not reduce the effectiveness of the design, and the work is completed generally in accordance with the plans and specifications.
- 68. We consider that a reasonable body of Dr Wu's peers would agree that the Engineering New Zealand Guidelines on producer statements set the standard to be expected by professional engineers carrying out construction monitoring and providing a PS4 to a building consent authority.
- 69. Dr Wu undertook to carry out construction monitoring himself, as set out in the Exemption Application. He issued a PS1 nominating a CM2 level of construction monitoring. At CM2 "a sample of each important work procedure, material of construction and component is reviewed for compliance with the plans and specifications and a representative sample of each important completed work is reviewed prior to enclosure or completion." No Council inspections were to take place as the works were to be carried out under a discretionary exemption.
- 70. The documentation Dr Wu submitted with the PS4 to the Council recorded only one inspection had been carried out by him on 23 February 2019, approximately nine weeks after the PS3 dated 12 December 2019. Dr Wu made no record of any previous inspections. We do not consider this level of documented construction monitoring met the CM2 criteria.
- 71. Further, Dr Wu has admitted there were differences between the design submitted in the Exemption Application and the completed works.
- 72. In issuing a PS4, an engineer confirms that building work has been carried out in accordance with the consented plans and Building Code. If there are variations to the design, supporting documentation must be provided. In this case, where the works were carried out under a discretionary exemption, Dr Wu by issuing a PS4, was providing confirmation to the Council that the works were carried out in accordance with the documents included in the Exemption Application and the Building Code.
- 73. In our opinion, the Council should be able to rely on a professional engineer responsible for issuing a PS4 to undertake and document construction monitoring to the level specified in the design documentation and to manage any variations in design arising during construction appropriately and transparently.

### Adequacy of the works

- 74. The Cavity Critter Report, including photographic evidence, raised a number of structural and non-structural concerns about the sub-floor and foundations. Dr Wu disagreed with the Report's comment that the foundations were of poor quality and also its criticisms relating to timber quality and strength.
- 75. We are concerned that Dr Wu did not identify any of the issues reported by Cavity Critter which should have been identified and remedied whilst the works were in progress, and which certainly would have been present at his inspection on 29 February 2019, following the completion of the repairs.

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- 76. The defects identified by Cavity Critter were not minor. We consider Dr Wu's failure to identify them demonstrated a regrettable lack of understanding of the standard of repair required to remedy earthquake damage to houses of the type and age of the Property.
- 77. The repairs did not meet acceptable quality standards for this type of work. Considering the repairs were undertaken under a discretionary exemption, we would have expected a reasonable professional engineer to take more care during the inspection process where there would be no inspections carried out by the Council. This was not the approach taken by Dr Wu as he has admitted that his documentation of his inspections fell below the standard of normal practice. Overall, the evidence of Dr Wu's work does not demonstrate or support that he acted in a way that would reasonably be expected of a professional engineer issuing a PS4.

### Geotechnical investigations

- 78. As set out above, the Sinotek report submitted with the Exemption Application classifies the Property as a B1 type construction and the site as "Green Zone, Technical Category 2 (TC2), yellow" area. According to MBIE Guidance documents, foundation design on TC2 land must be supported by geotechnical investigations.
- 79. In Dr Wu's submission, he said he carried out his own hand auger and Scala penetrometer tests on the site subsoils for his own satisfaction but did not include this documentation in the Exemption Application as he is not a geotechnical engineer. Dr Wu was unable to provide records of these tests when requested by the Disciplinary Committee.
- 80. We note that the Sinotek report explicitly states that no site-specific geotechnical investigation was undertaken as part of the assessment.
- 81. Dr Wu has relied heavily on MBIE guidance in specifying the repairs to be undertaken as detailed in the documentation submitted to the Council. However, he has not followed the guidance in respect of geotechnical requirements.
- 82. Dr Wu has accepted that he should have obtained an independent geotechnical report as part of his investigation and design and that his actions were inconsistent with the standard of practice reasonably expected of a Chartered Professional Engineer.
- 83. We accept Dr Wu's statement that he was not aware of the requirements of the MBIE guidelines. However, we consider that a reasonable body of Dr Wu's peers would have been aware of the requirements, which are standard and accepted guidelines in this area of practice. Furthermore, we would have expected a Chartered Professional Engineer would have checked the requirements of the guidelines before stating that their design complied with those standards, and ensured they were submitting accurate documentation to the Council.
- 84. We are further concerned that Dr Wu has not provided any record or information indicating that he undertook geotechnical investigations as part of the remedial works because he failed to document them or maintain any records of his investigations. We consider Dr Wu's failure to record and/or maintain record of investigations further demonstrate poor professional practices, which fall below the standard of practice to be expected of a professional engineer. This is not a standard of conduct which would be acceptable to responsible members of the profession.

### Conflict of interest

- 85. Dr Wu is subject to the Code of Ethical Conduct as both a Chartered Professional Engineer and a Chartered Member of Engineering New Zealand.<sup>13</sup> Under the Code of Ethical Conduct, engineers in performing their engineering activities, must disclose and appropriately manage any potential or actual conflicts of interests.<sup>14</sup>
- 86. The Engineering New Zealand Practice Note 8: Being Ethical (2016) states:
  - An engineer must disclose and appropriately manage, any financial or other interest that may, or may be seen to, impair their professional judgment on any engineering activities they are to carry out for that employer or client.<sup>15</sup>
- 87. Dr Wu has accepted that his interests as the homeowner and vendor, and his role as the Chartered Professional Engineer responsible for the design and construction monitoring of the project, resulted in a conflict of interest. Dr Wu further accepted that he failed to disclose and appropriately manage his conflict of interest to potential third-party buyers.
- 88. Considering Dr Wu's interests in the Property, he had a professional and ethical obligation to make his interests known to potential third party purchasers so that they could make an informed decision on the purchase of the Property. However, as accepted, Dr Wu did not make this information clear in the documentation he submitted to the Council. As noted earlier, Dr Wu left blank sections in key documentation submitted to the Council which would have identified Dr Wu's interests.
- 89. To comply with his ethical obligations, we consider Dr Wu needed to be open and transparent about his conflict of interest. We consider that a reasonable body of Dr Wu's peers in this situation would not only have ensured their property ownership and involvement in the repairs were made clear on the documentation, but would have also expressly disclosed their interest to relevant parties, in this case, to the Council and to potential third party purchasers.
- 90. We need not make a finding on whether Dr Wu's lack of disclosure was intentional, as whether or not Dr Wu was influenced by his conflicting interests is not directly relevant to our decision.
  Potential and perceived conflicts of interests, as well as actual conflicts, must be appropriately managed by engineers to ensure trust and confidence are maintained in the profession.
- 91. The standard of documentation Dr Wu submitted to the Council not only departed from standard practice by failing to include all of the relevant information, but his failure to disclose his interests to potential third party purchasers is a serious departure from accepted ethical standards.
- 92. We consider Dr Wu's behaviour risks lowering the public opinion of professional engineers from whom the public is entitled to expect a high standard of ethical behaviour. This is not a standard of conduct which would be acceptable to responsible members of the profession.

<sup>&</sup>lt;sup>13</sup> The Engineering New Zealand Code of Ethical Conduct (July 2016) contains identically worded requirements to the Code of Ethical Conduct applicable to Chartered Professional Engineers in Part 3 of the CPEng Rules.

 $<sup>^{14}\,\</sup>text{Rule 42F(a)(iii) of the CPEng Rules, clause 5(a)(iii) of the Engineering New Zealand Code of Ethical Conduct.}$ 

<sup>&</sup>lt;sup>15</sup> Engineering New Zealand Practice Note 8: Being Ethical (2016), page 7

# **DECISION**

### **GROUNDS OF DISCIPLINE**

- 93. We may make an order for discipline against Dr Wu as a Chartered Professional Engineer if we are satisfied he has performed engineering services in a negligent or incompetent manner or he has breached his obligations in the Code of Ethical Conduct.<sup>16</sup>
- 94. We may also make an order for discipline against Dr Wu as a member of Engineering New Zealand if we are satisfied he has breached his obligation to comply with the relevant Engineering New Zealand Code of Ethical Conduct, act competently, and act as a fit and proper person.<sup>17</sup>

### **DISCUSSION**

- 95. Dr Wu admitted:
  - a. the lack of documentation of his inspections fell below the standard of normal practice;
  - b. he ought to have obtained an independent geotechnical report for the project;
  - c. he should have documented his own geotechnical assessment which he carried out on the property;
  - d. there were differences between the Sinotek engineering work specified and the works completed;
  - e. there were opportunities for him to have showed a higher level of professional conduct in respect of the alleged defects;
  - f. his interest as the homeowner and vendor, and his role as the Chartered Professional Engineer responsible for the design and construction monitoring of the project, resulted in a conflict of interest; and
  - g. he failed to adequately disclose and appropriately manage his conflict of interest to potential third party buyers

and that these admitted facts establish grounds for discipline under section 21(1)(b) of the CPEng Act and clause 17 of the Regulations.

96. We must now determine whether Dr Wu performed engineering services in a negligent or incompetent manner, we refer to the decision of the Chartered Professional Engineers Council in R V  $K^{18}$ :

The starting point is to consider what standard sets the benchmark for negligent or incompetent behaviour. We consider that incompetence is a more serious allegation than negligence. One can be negligent without being incompetent, but it is highly unlikely that someone who is incompetent is not also negligent.

97. Further, Robinson v RA<sup>19</sup> states:

<sup>17</sup> Engineering New Zealand Rules 2017, r 10.5

<sup>&</sup>lt;sup>16</sup> CPEng Act, s21

<sup>&</sup>lt;sup>18</sup> R v K, Appeal Ruling 11/14, Chartered Professional Engineers Council at [36] and [38].

<sup>&</sup>lt;sup>19</sup> Robinson v RA, 10 July 2015, Appeal Ruling #21, Chartered Professional Engineers Council at [40(c)].

Whether engineering services have been performed in an incompetent manner is a question of whether there has been a serious lack of competence (or deficit in the required skills) judged by the areas of competence which in this case are encapsulated by Rule 6 [of the CPEng Rules].

- 98. Chartered Professional Engineers are assessed against twelve elements set out in Rule 6 of the CPEng Rules to establish their competence; these are:
  - (a) comprehend, and apply his or her knowledge of, accepted principles underpinning—
    - (i) widely applied good practice for professional engineering; and
    - (ii) good practice for professional engineering that is specific to New Zealand; and
  - (b) define, investigate, and analyse complex engineering problems in accordance with good practice for professional engineering; and
  - (c) design or develop solutions to complex engineering problems in accordance with good practice for professional engineering; and
  - (d) exercise sound professional engineering judgement; and
  - (e) be responsible for making decisions on part or all of 1 or more complex engineering activities; and
  - (f) manage part or all of 1 or more complex engineering activities in accordance with good engineering management practice; and
  - (g) identify, assess, and manage engineering risk; and
  - (h) conduct his or her professional engineering activities to an ethical standard at least equivalent to the code of ethical conduct; and
  - (i) recognise the reasonably foreseeable social, cultural, and environmental effects of professional engineering activities generally; and
  - (j) communicate clearly to other engineers and others that he or she is likely to deal with in the course of his or her professional engineering activities; and
  - (k) maintain the currency of his or her professional engineering knowledge and skills.
- 99. We find that Dr Wu demonstrated a serious lack of understanding of the requirements and standards for repairing a residential property after earthquake damage as evidenced by his failure to identify the inadequacies of the repairs completed, his failure to obtain an independent geotechnical report and poor standard of documentation. In these matters, we find that Dr Wu performed engineering services in an incompetent manner. He did not meet the standard reasonably to be expected of a Chartered Professional Engineer and Chartered Member of Engineering New Zealand.
- 100. As detailed in our analysis above, we find that Dr Wu has breached his obligations under the Code of Ethical Conduct as both a Chartered Professional Engineer and a Chartered Member in that he did not appropriately disclose and manage his conflict of interest.

### **DECISION**

101. Having considered all the evidence, we are satisfied that the grounds for discipline under section 21 of the CPEng Act and clause 17 of the Regulations have been met.

- 102. We find Dr Wu as a Chartered Professional Engineer has performed engineering services in an incompetent manner and he has breached his obligations in the Code of Ethical Conduct.<sup>20</sup>
- 103. We find that Dr Wu as a member of Engineering New Zealand has breached his obligation to comply with the relevant Engineering New Zealand Code of Ethical Conduct and to act competently.<sup>21</sup>
- 104. We also find that Dr Wu breached his obligations under the Code of Ethical Conduct as both a Chartered Professional Engineer and a Chartered Member in that he did not appropriately disclose and manage his conflict of interest.

# **ORDERS**

- 105. There is a range of disciplinary actions available to a disciplinary committee as set out in section 22(1) of the CPEng Act. There is also a range of sanctions in respect of Dr Wu's membership with Engineering New Zealand under clause 17(3) of the Regulations.
- 106. Counsel for Dr Wu made submissions on penalty on 28 April 2022. We also received submissions on penalty from the complainants on 21 April 2022.

### **RELEVANT LAW**

- 107. In *Roberts v A Professional Conduct Committee of the Nursing Council of New Zealand*<sup>22</sup> the High Court outlined a number of principles to be applied by the Health Practitioners Disciplinary Tribunal in determining the appropriate penalty to impose in disciplinary proceedings. The High Court determined that a disciplinary penalty must:
  - a. protect the public (including through deterrence of other practitioners from engaging in similar conduct);
  - b. set and maintain professional standards;
  - c. where appropriate, rehabilitate the practitioner back to the profession;
  - d. be comparable with penalties imposed on practitioners in similar circumstances;
  - e. reflect the seriousness of the practitioner's conduct, in light of the range of penalties available;
  - f. be the least restrictive penalty that can reasonably be imposed in the circumstances; and
  - g. be fair, reasonable, and proportionate in the circumstances.
- 108. The High Court also stated that while penalty may have the effect of punishing a practitioner, punishment is not a necessary focus for the Tribunal in determining penalty.
- 109. The principles in *Roberts* are broadly applicable to our power to make disciplinary orders under section 22 of the CPEng Act and clause 17 of the Regulations and they are the principles we rely on when considering the appropriate penalty orders in this case.

<sup>&</sup>lt;sup>20</sup> CPEng Act, s21

 $<sup>^{\</sup>rm 21}$  Engineering New Zealand Rules 2017, r 10.5

<sup>&</sup>lt;sup>22</sup> [2012] NZHC 3354.

110. The principles have general application to professional disciplinary proceedings in the light of the Supreme Court's decision in *Z v Dental Complaints Assessment Committee*.<sup>23</sup> In *Z*, the Supreme Court makes general statements about the purposes of professional disciplinary proceedings, noting that such proceedings are designed to:

Ascertain whether a practitioner has met appropriate standards of conduct in the occupation concerned and what may be required to ensure that, in the public interest, such standards are met in the future. The protection of the public is the central focus.

- 111. This is consistent with *Roberts*, as *Roberts* lists public protection and the maintenance of professional standards as the foremost considerations relevant to penalty.
- 112. The Supreme Court in  $Z^{24}$  also states that while professional disciplinary proceedings are not intended to punish practitioners, they may have a punitive effect in practice. This is also consistent with the principles set out in *Roberts*, in that the penalty must be the least restrictive penalty and that punishment is not a necessary focus of a disciplinary penalty.
- 113. The reasoning underlying *Roberts'* focus on practitioner rehabilitation is less relevant to penalties under the Act in light of the fact that the removal or suspension of a Chartered Professional Engineer's registration does not prevent the individual practising as an engineer but does prevent use of the Chartered Professional Engineer title.
- 114. It is appropriate that disciplinary penalties mark the profession's condemnation of the relevant conduct, noting that to do otherwise would not be consistent with the purpose of the Act to establish the title of Chartered Professional Engineer as a mark of quality.<sup>25</sup>

### DR WU'S SUBMISSIONS

- 115. Counsel for Dr Wu submits that suspension and cancellation is disproportionate and would unfairly punish Dr Wu. Counsel submitted that the primary purpose of suspension or cancellation is the protection of the public and that the accepted conduct subject to the complaint did not put the public at risk and can be fixed.
- 116. Counsel submitted that censure, and a fine of \$1,500 is consistent with previous disciplinary decisions and reflects Dr Wu's acknowledgement of wrongdoing and willingness to learn from his mistakes.
- 117. Counsel said this matter is comparable to *Steven King-Turner CMEngNZ CPEng*<sup>26</sup> where the Disciplinary Committee ordered Mr Turner to pay a fine of \$1,000. In reaching their decision, the Disciplinary Committee acknowledged there were no apparent life safety risks, the engineer's acknowledgment that there were lessons to be learned from the complaint, and subsequent steps which he had taken.

<sup>&</sup>lt;sup>23</sup> [2008] NZSC 55.

<sup>&</sup>lt;sup>24</sup> Ibid.

 $<sup>^{\</sup>rm 25}$  Chartered Professional Engineers of New Zealand Act 2002, s 3.

<sup>&</sup>lt;sup>26</sup> Complaint about Steven King-Turner (27 May 2021) available online at https://www.engineeringnz.org/documents/798/Disciplinary\_Committee\_decision\_on\_complaint\_against\_Steven\_King-Turner1.pdf

- 118. Counsel also referred us to the previous disciplinary decisions of *David Mulholland CMEngNZ CPEng*<sup>27</sup>, *Mr C and Masterton Building*<sup>28</sup>, and *Kevin O'Connor CMEngNZ CPEng*<sup>29</sup>, stating that those decisions can be distinguished from present facts for the following reasons.
- 119. In the *Mulholland* case, the Committee held that they would expect a reasonable Chartered Professional Engineer and member of Engineering New Zealand to be familiar with the applicable MBIE guidelines when carrying out geotechnical works. Counsel submitted that the case of Mr Mulholland is distinguishable on the basis that Mr Mulholland's conduct was not a one off, he went to lengths to competently practice geotechnical engineering, and demonstrated an unwillingness to engage with or learn from peer reviewers who were engaged to review his work. Mr Mulholland was censured and ordered to pay a fine of \$2,500 and costs of \$10,615.
- 120. In *Mr C and Masterton Building* it was found that an engineer had signed off designs at an early stage of the project, which did not meet the required standard and included incomplete information. Mr C was ordered to pay a fine of \$5,000 and costs of \$8,000. Counsel submitted that the decision of *Mr C and Masterton Building* is distinguishable on the basis that the Investigating Committee stated that Dr Wu's overall design intentions were satisfactory.
- 121. Referring to the recent decision concerning *Kevin O'Connor*, Counsel cited the Disciplinary Committee's statement that Mr O'Connor's:
  - ...actions showed a lack of judgement and a lack of care. Whilst one such departure from the accepted standards might be considered to be towards the lower end of the scale, we view multiple breaches over several years as being very serious, and our orders need to reflect this view.
- 122. Mr O'Connor was ordered to pay a fine of \$3,500 and censured. Counsel noted that in reaching their decision, the Disciplinary Committee considered the following factors:
  - Mr O'Connor's practice did not pose a risk to the public;
  - The number of buildings involved (six);
  - The time over which the conduct occurred; and
  - The conduct was not a one-off.
- 123. Counsel submitted that in the present case, there was only one building involved, there were no wider public safety concerns, Dr Wu has not committed multiple breaches over several years, and Dr Wu did not rely on reviews of other engineers in signing the PS1 in question.

### Adequacy of design

124. Counsel for Dr Wu submitted that the evidence does not demonstrate a serious lack of competence or deficit in the skills required of a Chartered Professional Engineer. Although Dr Wu has acknowledged there were shortcomings in his practice; it is submitted those shortcomings spoke more to a lack of attention and failure to check the requirements than to negligence or incompetence. Counsel further submitted that the works carried out by Dr Wu did not put the public at risk and did not jeopardise the integrity of the Property.

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<sup>&</sup>lt;sup>27</sup> Complaint about David Mulholland (2 November 2020) available online at https://www.engineeringnz.org/documents/679/Disciplinary\_Commitee\_decision\_on\_complaint\_against\_David\_Mulholland.pdf

<sup>&</sup>lt;sup>28</sup> Complaint about Mr C (18 June 2021) case summary available online at https://www.engineeringnz.org/documents/962/Case\_Summary\_regarding\_Mr\_C\_Masterton\_building.pdf

<sup>&</sup>lt;sup>29</sup> Complaint about Kevin O'Connor (18 June 2021) available online at https://www.engineeringnz.org/documents/961/Disciplinary\_Committee\_decision\_-\_Kevin\_OConnor.pdf

### 125. Dr Wu's submission states:

Dr Wu accepts that with the benefit of hindsight that he ought to have obtained an independent geotechnical assessment report on the Property and should have documented his own geotechnical assessment which he carried out on the property. However, at the time Dr Wu genuinely believed that an independent geotechnical assessment was not required, and that a Scala Penetrometer test was sufficient. Dr Wu based his understanding on NZS 3604:2011 and section 3.4.1 of the MBIE Guidance "Repairing and rebuilding houses affected by the Canterbury earthquakes: Geotechnical investigations)".

- 126. Counsel also stated that after the repairs were completed, Dr Wu believed the repair works were compliant with the relevant standards and Building Code and believed they had been carried out correctly.
- 127. Counsel submitted that Dr Wu has already taken steps to improve his practice and is committed undertaking further steps in the future to ensure that he does not make the same mistakes.
- 128. Dr Wu's submission states that going forward Dr Wu will:
  - engage an independent geotechnical engineer to conduct an investigation;
  - adequately document his own geotechnical assessments; and
  - carry out further professional development on these requirements.
- 129. Counsel outlined steps Dr Wu has already taken, stating Dr Wu has reviewed the relevant MBIE guidance, including the requirements relating to geotechnical investigations and now seeks a geotechnical engineer's advice or other independent opinions from professionals as and when required. Counsel said Dr Wu goes above and beyond to show a higher level of professional conduct in his work and keeps a written record of all geotechnical investigations and inspections.
- 130. Counsel outlined number of factors which she submitted should be taken into consideration by the Committee when determining what penalty to impose:
  - a. Dr Wu has been a Chartered Professional Engineer since 12 August 2014 and has been a member since 18 June 2013;
  - b. Dr Wu has not previously been the subject of a complaint to Engineering New Zealand;
  - c. Dr Wu has taken steps to ensure the same issues do not arise again;
  - d. Dr Wu is the sole director of Sinotek, which employs three employees. If Dr Wu is suspended or removed from the register, then this will seriously compromise Sinotek's work and ability to continue to operate;
  - e. Dr Wu did not act deliberately in breach of the relevant rules and regulations;
  - f. Dr Wu willingly provided the Council with further information as and when requested;
  - g. Dr Wu's shortcomings did not put the public safety at risk;
  - h. There was only one Property in question;
  - i. It was a residential Property;
  - j. Dr Wu has agreed to the Summary Of Facts, and has accepted that there were shortcomings in his work; and
  - k. Dr Wu is willing and eager to carry out professional development to ensure that he does not make the same mistakes in his future work.

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### Non-disclosure of interest

- 131. Counsel submitted that Dr Wu's failure to disclose his interest in the Property was not deliberate; it was a discreet and honest breach of the Ethical Code and the appropriate penalty is censure.

  Counsel said Dr Wu believed (albeit incorrectly) that the Council knew he was the Property owner, and that it was sufficient that his identity as the owner of the Property could be found on some of the documentation submitted to the Council.
- 132. It was further submitted that Dr Wu accepts and has learned that perceived conflicts ought to be disclosed, and that he ought to have made the conflict clearer. Counsel referenced a previous disciplinary committee decision<sup>30</sup> where the practitioner who was alleged to have altered a letter issued by the Institution of Professional Engineers New Zealand, which recorded his competencies was found to have showed a serious lack of care and his breaches were serious. Counsel said this case differs because Dr Wu did not deliberately misrepresent his competencies nor fail to act with honesty and integrity. Rather, Dr Wu mistakenly believed that he did not need to disclose his interest as the owner of the Property.
- 133. Furthermore, Counsel noted that Dr Wu has taken steps to ensure that all conflicts, if and when they arise, are disclosed going forward. Dr Wu has reviewed Engineering New Zealand Practice Note 8: Being Ethical (2016) and ensures that he will:
  - Not put himself in a conflicted or perceived conflicted position, if however, this occurs then he
    will make any such conflict abundantly clear and will declare it from the outset of the project
    to the public;
  - b. Ask himself the questions set out at page 2 of the Practice Note and will ensure that he discusses any issues which may arise, with his colleagues and peers in the profession;
  - c. Act honestly and objectively, with integrity at all times; and
  - d. Ensure that he exceeds the expected standards of him at all times.

### Costs

- 134. Counsel further submitted that the Disciplinary Committee should consider following factors be taken into consideration in determining the costs order in this case:
  - e. Dr Wu agreed to the Summary of Facts and has been co-operative during Engineering New Zealand's investigation; and
  - f. The hearing was dispensed with.
- 135. Counsel submitted that in light of above, an order of 40% of costs is appropriate in the circumstances.

### Naming

- 136. Counsel submitted that there are compelling reasons to justify an exception to the starting point of naming the practitioner in this case.
- 137. She further submitted that Dr Wu and Sinotek do not present a risk to public safety, it is not necessary to publish Dr Wu's name to demonstrate accountability as there is no wider public interest in this matter and Dr Wu has accepted responsibility and taken steps to review his processes.

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<sup>&</sup>lt;sup>30</sup> Complaint about Mr A (15 September 2016) available online at https://www.engineeringnz.org/documents/127/Ethical\_Representation\_of\_Engineering\_Competence.pdf

- 138. We were also referred to the decision of *Ang v A Professional Conduct Committee*<sup>31</sup>, where it was held that:
  - [W]here... there is no striking off or suspension but rather, as here, a decision that practice may continue, there is much to be said for the view that publication of the defendant's name is contrary to the spirit of the decision and counterproductive.
- 139. Counsel also referred us to a Disciplinary Committee decision<sup>32</sup> regarding a house design. In that case, the Committee found that because there were no wider competency concerns and the engineer had accepted accountability, naming them publicly would be a disproportionate response. Similarly, it was submitted that naming Dr Wu would be disproportionate and punitive.
- 140. For the reasons set out above, it was Dr Wu's submission that a censure and fine of \$1,500 is appropriate in the circumstances. Dr Wu also submitted that the publication of his name would be disproportionate and punitive in this case and would cause irreparable damage to his career.

### THE COMPLAINANTS' SUBMISSIONS

- 141. The complainants submitted that removal from membership of Engineering New Zealand plus costs and expenses as per clause 17(4) of the Disciplinary Regulations would be appropriate.
- 142. The complainants said there was "clear evidence" that:
  - [Dr Wu's] actions were premeditated and deliberate in an attempt to deceive the Christchurch City Council, potential buyers and other stakeholders. These actions were purely for his own personal financial gain which show a reckless disregard for the future financial loss, plus the detrimental effects on the wellbeing and mental health of vulnerable 1st home buyers.
- 143. The complainants also said they considered that Dr Wu took advantage of the Canterbury Earthquake situation which has had devastating effects on some homeowners. They added, "His actions could have led to potential loss of life savings where buyers were left with a damaged uninsurable property, resulting in defaulting on their mortgage or financial ruin."
- 144. The complainants said Dr Wu had demonstrated a lack of professional integrity and respect throughout Engineering New Zealand's complaints process. They said Dr Wu continually denied and disputed any responsibility for over two years and made personal accusations towards the complainants and Cavity Critter throughout the complaints process.
- 145. In their submissions, the complainants raised concerns they have about the possibility of other properties Dr Wu has worked on having substandard repairs.
- 146. The complainants stated:

We understand that he has not had any other complaints about his other properties, but realistically this type of thing goes unnoticed by most unsuspecting home buyers. Then it is a further step to take action and actually make a formal complaint to an organisation like Engineering NZ. In this case we only just managed to pick up the discrepancy by chance. We have strong concerns that there are other unsafe properties that could cause harm to homeowners and families in the future and therefore request further investigation into Mr Wu's dealings with Canterbury Earthquake damaged properties.

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<sup>&</sup>lt;sup>31</sup> Ang v a Professional Conduct Committee [2016] NZHC 2949

<sup>&</sup>lt;sup>32</sup> Complaint about a Chartered Professional Engineer and Chartered Member of Engineering New Zealand (18 October 2019) available online at https://www.engineeringnz.org/documents/537/Disciplinary\_Committee\_decision\_regarding\_house\_design.pdf

### DISCUSSION

- 147. The public places significant trust in engineers to self-regulate. As a professional, an engineer must take responsibility for being competent and acting ethically. The actions of an individual engineer play an important role in the way in which the profession is reviewed by the public.
- 148. We found Dr Wu departed from what could be expected of a reasonable engineer. That is, we have found that he has practiced engineering in an incompetent manner, and he has breached his obligations under the Code of Ethical Conduct to undertake engineering activities in a careful and competent manner and to disclose and manage conflicts of interest.
- 149. In our view, Dr Wu's actions, if condoned, would undermine the public's trust in the engineering profession and reduce the public confidence in the Chartered Professional Engineer title and membership with Engineering New Zealand.

### Registration and Membership of Engineering New Zealand

- 150. In respect of orders relating to registration as a Chartered Professional Engineer, we may order that:
  - an engineer's registration be removed, and that they may not apply for re-registration before the expiry of a specified period;
  - an engineer's registration be suspended for a period of no more than 12 months or until they
    meet specified conditions relating to the registration;
  - the engineer be censured;
  - the engineer must pay a fine not exceeding \$5,000.
- 151. Where a Disciplinary Committee orders that the engineer's registration be removed, we may not order a fine.
- 152. In respect of membership with Engineering New Zealand, we may order that an Engineering New Zealand member be:
  - expelled from membership;
  - suspended from membership;
  - suspended from membership until such time as the Engineering New Zealand member has fulfilled requirements for professional development as have been specified by the Committee;
  - suspended from membership for a period of time if by a prescribed date, the member fails to fulfil requirements for professional development as has been specified by the Committee;
  - fined a maximum of \$5,000; and
  - reprimanded or admonished.
- 153. We have found that Dr Wu's behaviour fell below the standard expected of a professional engineer. It is important that Engineering New Zealand in its role as a membership body and as the Registration Authority for Chartered Professional Engineers condemns this behaviour, and that this condemnation is reflected in the penalty ordered.
- 154. We have found that Dr Wu acted incompetently in carrying out post-earthquake repair works on a residential property. Dr Wu's actions showed a serious lack of understanding of the standards and requirements of this type of work. Following a finding of incompetence, consideration must be given to whether there is a serious risk to public safety which would warrant removal of an

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- engineer's registration or a suspension. We have no reason to question Dr Wu's competence to carry out other structural engineering work as is generally undertaken by his company. We consider that removal or suspension from the register of Chartered Professional Engineers, or from membership with Engineering New Zealand, would be disproportionate and is not warranted. We have decided that censure and a fine is an appropriate sanction in this case. In addition, we consider that Dr Wu should be required to undertake professional development, as discussed below.
- 155. In Dr Wu's submissions, a number of precedents are cited, including, a complaint about *Steven King-Turner*. In that case the Disciplinary Committee found that Mr King-Turner's conduct fell below the standard expected of a professional engineer but that the departure was towards the lower end of the scale. Mr King-Turner had signed off construction on a residential building without ensuring the work had the appropriate building consent. The Committee in that case considered there to be no life safety risks, no indication of a pattern of behaviour, and no significant concerns as to Mr King-Turner's competence. Counsel for Dr Wu submitted that the present facts are somewhat comparable. We disagree. There was no finding of performing work incompetently in the case cited.
- 156. Counsel for Dr Wu further submitted that this matter can be distinguished from the previous Disciplinary Committee decisions of *David Mulholland*, *Mr C and Masterton Building* and *Kevin O'Connor*. This was on the basis that in this case there was only one building involved, there were no wider public safety concerns, Dr Wu has not committed multiple breaches over several years, and Dr Wu did not rely on reviews of other engineers in signing the PS1 in question.
- 157. We disagree with Counsel's submissions that Dr Wu's shortcomings are at the lower end of the scale and spoke more to a lack of attention and failure to check the requirements. It is our view the reason for the inadequacy of the repairs and the lack of geotechnical investigations was not a lack of care or attention or a failure to check requirements but a serious lack of understanding of the requirements and standards applicable to the work.
- 158. In addition, Dr Wu's failure to appropriately disclose and manage his conflict of interest meant that neither the Council, when it approved the discretionary exemption, nor potential purchasers of the Property, including the complainants, were provided with complete and accurate information. The public reasonably relies on the independence of engineering assessments and reports when purchasing a property. There was nothing in the Sales Brochure for the Property that would alert potential purchasers, to Dr Wu's interest as homeowner and vendor, and his role as the Chartered Professional Engineer responsible for the design, construction monitoring and sign-off of the project.
- 159. Although Dr Wu has provided examples of how he intends to improve his professional practice in the future, we are of the view that further professional development is necessary for rehabilitation and to reinforce the standards of, and public trust in, the engineering profession.
- 160. Whilst we cannot make an order for professional development under the CPEng Act unless it is as a condition relating to completion of a period of suspension, we may make such an order under the Regulations, and impose a period of suspension should the engineer fail to complete the professional development specified. Accordingly, the Committee orders Dr Wu to complete eight hours of professional development in post-earthquake repair of residential property, and eight hours of professional development in professional practice and ethics.
- 161. Dr Wu must complete this professional development to the satisfaction of the chair of this Disciplinary Committee.

- 162. If Dr Wu does not complete the specified professional development to the satisfaction of Engineering New Zealand by 30 April 2023 (six months from the date of this decision), his membership of Engineering New Zealand will be suspended for six months effective 1 May 2023.
- 163. We acknowledge that Dr Wu has stated that he has taken positive steps to improve his practice. We are hopeful that Dr Wu can use this opportunity to further improve his knowledge and professional practice.

### **Fine**

- 164. The CPEng Act and the Regulations state that the Disciplinary Committee may order that an engineer pay a fine up to a maximum of \$5,000.<sup>33</sup>
- 165. In recent disciplinary cases we have reviewed as part of our deliberations, we note that fines imposed on engineers who have been held to have breached their professional and ethical obligations ranged from \$1,000 to \$3,500. We acknowledge that in cases of particularly grave wrongdoing, there may not have been a fine imposed because the Act does not allow for a fine to be imposed in addition to removal of engineer from the register of Chartered Professional Engineers. That restriction does not apply to us in this case.
- 166. Reviewing other cases is helpful but each must be considered on its own merits and no two complaints are the same. Furthermore, we are not bound by precedent.
- 167. Counsel for Dr Wu submitted that a fine of \$1,500 would be appropriate and consistent with previous disciplinary decisions and Dr Wu's acknowledgement of wrongdoing and willingness to learn. We disagree. We consider Dr Wu's actions to be a serious breach of his obligations. However, we do acknowledge that he has expressed a willingness to learn from his mistakes. We find that the appropriate fine in this case is \$2,500. We consider the amount reflects the gravity of the conduct and is consistent with precedent.

### Costs

- 168. A disciplinary committee may order that the engineer pay costs and expenses of, and incidental to, the inquiry by Engineering New Zealand.<sup>34</sup> We note the ordering of payment of costs is not in the nature of a penalty.
- 169. When ordering costs, it is generally accepted that the normal approach is to start with a 50% contribution.<sup>35</sup> However, that is a starting point and other factors may be considered to increase or reduce that portion. Those factors include any cooperation from or attendance at the hearing by the engineer, and consistently with the level of costs in previous decisions. The balance of costs must be met by the profession itself.<sup>36</sup>
- 170. In respect of the medical professional, the Court in Vatsyayann v PCC said:<sup>37</sup>
  - ...professional groups should not be expected to bear all the costs of a disciplinary regime and that members of the profession who appeared on disciplinary charges should make a proper contribution towards the costs of the inquiry and a hearing; that costs are not punitive; that the practitioner's means, if known, are to be considered; that a practitioner has a right to defend himself and should not be deterred by the risk of a costs

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<sup>&</sup>lt;sup>33</sup> Section 22(1)(d) of the CPEng Act and clause 17(3)(e) of the Regulations.

<sup>&</sup>lt;sup>34</sup> Section 22(4) of the CPEng Act and clause 17(3)(g) of the Regulations.

<sup>&</sup>lt;sup>35</sup> Including Cooray v Preliminary Proceedings Committee HC Wellington AP 23/94, 14 September 1995 per Doogue J.

<sup>&</sup>lt;sup>36</sup> PCC v Van Der Meer 1019/Nur18/422P

<sup>&</sup>lt;sup>37</sup> [2012] NZHC 1138 at [34].

order; and that in a general way 50% of reasonable costs is a guide to an appropriate costs order subject to a discretion to adjust upwards or downwards.

171. Further, in O'Connor v Preliminary Proceedings Committee in the High Court stated:38

It is a notorious fact that prosecutions in the hands of professional bodies, usually pursuant to statutory powers, are very costly and time consuming to those bodies and such knowledge is widespread within the professions so controlled. So as to alleviate the burden of the costs on the professional members as a whole the legislature had empowered the different bodies to impose orders for costs. They are nearly always substantial when the charges brought are successful and misconduct admitted, or found.

- 172. As noted above, the usual approach is to start with a 50 percent contribution as a default and to consider any reasons which may justify a reduction or an uplift from that portion. In the recent cases we have reviewed, disciplinary committees have ordered contributions to costs ranging from 40 percent to 60 percent.
- 173. We have not received any information about Dr Wu's financial position that would indicate any financial hardship or inability to pay costs.
- 174. We acknowledge that Dr Wu accepted the Investigating Committee's findings and agreed to a summary of facts prepared by us. This allowed us to dispense with a disciplinary hearing and proceed directly to a penalty decision. Counsel for Dr Wu submitted that because of these factors and Dr Wu's cooperation, an order for 40 percent of costs is appropriate. We consider the cost savings of resulting from these factors will already be reflected in the total amount of costs incurred by Engineering New Zealand and do not merit a lower contribution.
- 175. We have considered other Disciplinary Committee orders of costs. We do not consider there any matters that would indicate we need to move the payment of costs upwards or downwards.
- 176. Taking all factors into account, it is our decision that Dr Wu is to pay 50 percent of the costs of Engineering New Zealand's investigation, being \$7,700 plus GST.

### Naming and publication

- 177. We may order the member be named, the order against the member be stated and the nature of the breach described in the official journal of Engineering New Zealand or publicised in any other manner as may be prescribed by the Committee.<sup>39</sup>
- 178. The Regulations do not prescribe factors we should consider when deciding whether to name an engineer. While we are mindful of the specific legislative test of 'desirability' set out in the Health Practitioners Competence Assurance Act 2003, we are guided by the public interest factors considered by the medical profession when deciding whether to name a practitioner.<sup>40</sup> These include:
  - openness and transparency in disciplinary proceedings;
  - accountability of the disciplinary process;
  - public interest in knowing the identity of the practitioner;
  - the importance of freedom of speech;
  - unfairly impugning other practitioners; and

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<sup>&</sup>lt;sup>38</sup> O'Connor v Preliminary Proceedings Committee HC Wellington AP 280/89, 23 August 1990 at [13] per Jeffries J.

<sup>&</sup>lt;sup>39</sup> Clause 17(3)(h) of the Disciplinary Regulations

<sup>&</sup>lt;sup>40</sup> The presumption in s 95(2) of the Health Practitioners Competence Assurance Act 2003 is that a hearing shall be in public, but the Tribunal has discretion to grant name suppression. The test is whether it is "desirable" to prohibit publication of the name or any particulars of the affairs of the person in question and the Tribunal must consider both the interests of any person and the public interest.

- that where an adverse disciplinary finding has been made, it is necessary for more weighty private interest factors (matters that may affect a family and their wellbeing, and rehabilitation of the practitioner) to be advanced to overcome the public interest factors for publication.41
- 179. Naming is the starting point and will only be inappropriate in a limited number of circumstances where the engineer's privacy outweighs the public interest. In Y v Attorney-General<sup>42</sup> the Court of Appeal explored the principles that should guide the suppression of the names of parties, witnesses, or particulars in the civil context. The starting point is the principle of open justice. 43 The question is then, do the circumstances justify an exception to the principle of open justice. In a professional disciplinary context, a practitioner is "likely to find it difficult to advance anything that displaces the presumption in favour of disclosure".44 This is because the practitioner's existing and prospective clients have an interest in knowing details of the conduct, as this allows them to make an informed decision about the practitioner's services.<sup>45</sup>
- 180. Consistent with these precedents, the starting point is naming of engineers subject to a disciplinary order is the normal expectation. This is because public protection is at the heart of disciplinary processes, and naming supports openness, transparency, and accountability.
- 181. We do not accept Counsel for Dr Wu's submission that we should depart from the presumption of naming in this case because:
  - Dr Wu does not present a risk to the public;
  - it is not necessary to publish his name to demonstrate accountability; and
  - Dr Wu has accepted responsibility for his actions and has taken steps to review his processes.
- 182. Counsel also referenced Ang which suggests naming may be contrary to the spirit of a decision not resulting in striking off or suspension and also counterproductive.
- 183. We consider there are no factors supporting suppression which displace the high threshold, nor justify departing from, the fundamental principle towards naming. We do not agree with Counsel's submission that naming Dr Wu would be disproportionate and punitive in this case. We do not consider Dr Wu has advanced any private interest factors that would displace the public interest factors in naming.
- 184. Accordingly, we order that this decision be published in full by Engineering New Zealand and that Dr Wu's name suppression be lifted.

### **SUMMARY OF ORDERS**

- 185. In exercising our delegated powers, we order that Dr Wu:
  - must undertake professional development in:
    - technical considerations relating to post-earthquake repair of residential properties (at least eight hours), and

<sup>41</sup> Professional Conduct Committee of the Pharmacy Council of New Zealand v El-Fadil Kardaman 100/Phar18/424P at [113] – [114].

<sup>&</sup>lt;sup>42</sup> [2016] NZCA 474.

<sup>43</sup> Ibid at [25]

<sup>44</sup> Ibid at [32]

<sup>45</sup> Ibid.

professional practice and ethics (at least eight hours).

The above professional development must be completed to the satisfaction of the Chair of the Disciplinary Committee. If Dr Wu does not complete the above professional development by 30 April 2023 (being six months from the date of this decision), his membership of Engineering New Zealand will be suspended for six months effective 1 May 2023.

- is censured, pursuant to section 22(1)(c) of the CPEng Act;
- pay a fine of \$2,500, pursuant to section 22(1)(d) of the CPEng Act; and
- pay 50% of the costs incurred by Engineering New Zealand in investigating this matter, being \$7,700 plus GST, pursuant to section 22(4) of the CPEng Act.

### 186. In addition, the Registration Authority will:

- notify the Registrar of Licensed Building Practitioners appointed under the Building Act 2004 of the order and the reasons for it; and
- publish and name Dr Wu in our final decision of this complaint on its website, in a public press release, and in any other communication it considers appropriate.

Jenny Culliford FEngNZ (Ret.)

Chair of Disciplinary Committee