Appeal Number: 03/12

In the Matter of the Chartered Professional Engineers of New Zealand Act 2002

AND

In the matter of an appeal to the Chartered Professional Engineers Council pursuant to Section 35

Between

W
Appellant

And

S
Respondent

Decision of the Chartered Professional Engineers Council
dated 17th of December 2012

This is an appeal to the Chartered Professional Engineers Council under the Chartered Professional Engineers of New Zealand Act 2002 ("the Act") from a decision of a Disciplinary Committee dated 31 May 2012 in which complaints by the

Appellant against the Respondent were dismissed. The Disciplinary Committee found specifically:

That the Respondent had not breached s21(1)(b) or s.21(1)(c) of the Act, Rule 45 or Rule 53 and consequently that there were no grounds for disciplining the Respondent (paragraph 5.2 of the decision).

The Appellant was the Appellant and lodged an appeal against the decision of the Disciplinary Committee on 1 July 2012 (having received the decision on 8 June 2012).

The Disciplinary Committee's findings in relation to there being no breach of s21(1)(b) of the Act or rule 53 were not appealed.

During the course of the appeal the Appellant withdrew the allegation that the Respondent had been dishonest, so there was no need for the Council to consider the relief sought that there had been a breach of Rule 45.

This leaves an appeal against the dismissal by the Disciplinary Committee of an allegation that the Respondent was in breach of s21(1)(c) of the Act in performing engineering services in a negligent or incompetent manner.

On 16 August 2012 the parties and the Registration Authority were informed by letter of the appointment of an Appeal Panel to hear the appeals consisting of Andrew Hazelton as Principal, Mr Andrew Read, Mr Roly Frost, Mr Jon Williams and Ms Sharyn Westlake as members. The letter:

Included a copy of the Council's practice note;

Advised that copies of the Registration Authorities complete file would be made available to both Appellant and Respondent (these were mailed);

That in accordance with the legislation the appeal would be a rehearing.

The reference in the letter to Ms Sharyn Westlake was incorrect and was later amended to Ms Jane Nees.

A telephone conference was held with the parties' counsel on 28 August 2012 at which directions were provided concerning an application to admit further evidence from the Appellant.

On 4 September 2012 the Appellant filed an application for the admission of further evidence, being an affidavit from an expert and NZTA employee, Mr Bullot.

On 25 September 2012 the Respondent filed submissions in opposition to the application by the Appellant.

On 28 September 2012 the Appeal Panel issued a ruling on the admission of additional evidence by the Appellant allowing the admission of the affidavit but providing the Respondent with the right to file a further affidavit from Mr Bishop in reply to that. Reasons for the admission of the further evidence, which is contemplated by the Act, are provided in the ruling. Directions were also filed ordering sequential exchange of submissions which were duly filed. The Respondent

also filed a further statement when leave had not been granted for the production of such a statement. As a consequence a telephone conference was held on 9 November 2012 at which it was agreed with Counsel that the further statement from the Respondent would be admitted, with the Appellant having the opportunity to comment on that over the weekend prior to the hearing commencing on 12 November 2012. It was also confirmed that the two experts, Mr Bullot and Mr Bishop would be heard together.

The hearing commenced on 12 November 2012 but was not completed on that day so closing submissions from both parties were heard on 7 December 2012 with the transcript of the earlier hearing date having been made available to both parties. We heard evidence from the Appellant, the Respondent and from the two experts, Mr Bullot and Mr Bishop. Mr Bullot is an employee of NZTA and Mr Bishop is a CPEng engaged in heavy vehicle certification. All witnesses were sworn in the normal way.

Approach to this Appeal

Appeals are by way of rehearing (section 37(2)). We are entitled to confirm, vary or reverse a decision (section 37(5)(a)). Following *Austin, Nichols & Co Inc v Stichting Lodestar* [2008] 2 NZLR 141 we are entitled to take a different view from the Disciplinary Committee, but the Appellant carries the burden of satisfying us that it should differ from the Disciplinary Committee's decision. We should have regard to the fact that the disciplinary tribunal heard the Appellant and the Respondent in person, but in this case the facts are largely uncontested and we decided to admit further evidence that was not available to the Disciplinary Committee and as a consequence, we heard witnesses in person. While the Disciplinary Committee is a specialist body including Chartered Professional Engineers, this Council likewise has such representation. While therefore acknowledging the expertise of the Disciplinary Committee we do not think we are required to have additional regard for its expertise.

Background

A letter of complaint against the Respondent dated 15 July 2011 was received by IPENZ from the Appellant. The letter alleged a lack of competence by the Respondent in regard to his certification of a trailer drawbar. Much of the original letter of complaint centred on the allegation of dishonesty which has been withdrawn.

It is clear from the evidence that:

The Appellant designed a drawbar which was fabricated and installed onto a commercial vehicle.

The Respondent inspected the drawbar. He was in possession of the Appellant's drawings for the drawbar, but not the Appellant's calculations.
The Respondent recognised the drawbar as being based on a "Domett Freuhauf" design. This company went into liquidation some years ago, but the Respondent acquired its designs and calculations.
The Respondent has 42 standard designs on its records for which it had the design information. One of these designs is very similar to the Domett Freuhauf design. Relying on its own standard design, for which design calculations were held, the Respondent certified the drawbar as being compliant on the basis that it was "structurally the same as the Appellant's design".
The Respondent stated that he took design responsibility for the drawbar.
The Respondent was not aware until the hearing before the Council that the Appellant's design had "dropped" the centre of the drawbar from a standard design by 50mm.
The basis of the complaint is that this certificate was given negligently as the Respondent did not have the design calculations that were undertaken by the Appellant but instead relied on his own engineering judgment by comparing a standard design for which calculations had been undertaken and which was similar to that constructed.
It is important to stress at the outset that there was no evidence, and indeed no allegation from anyone, that the vehicle which is the subject of this particular certification is unsafe. Indeed Mr Bullot, an employee of the NZTA which is charged with auditing certifiers and their processes gave specific evidence, which we accept, that he had no expectation that the vehicle was unsafe.

Legislative Background

Pursuant to the Land Transport Act 1998 the New Zealand Transport Agency promulgate and publish the Land Transport Rules which have similar status to Regulations. One such rule is the Vehicle Standards Compliance Rule 35001/1 and amendments ("the Compliance Rule") which first came into force in 2002.
Rule 2.2(1)(i) states:
The Agency may appoint vehicle inspectors and inspecting organisations to carry out any or all of the following activities:
(i) heavy vehicle specialist inspection and certification;
Rule 2.3(1) states:
2.3(1) The Agency may specify the period of appointment for a vehicle inspector or inspecting organisation, or a person appointed under 2.2(3), and may impose requirements and conditions as to the performance of the inspection and certification activities, including the performance of those activities at individual sites.

Pursuant to Rule 2.3(1) it is NZTA's practice to appoint heavy vehicle inspectors by a Deed of Appointment. A standard form of such a Deed was provided to the Appeal Panel annexed to the evidence of Mr Bullot. No issue was taken by the Respondent that this form of Deed was standard to the industry.

The Deed provides that the Respondent would undertake his services in accordance with various provisions including all relevant legislation, a document published by NZTA entitled "the Heavy Vehicle Specialist Vehicle Inspection Requirements Manual" known as "the VIRM", and "any published or ethical standards of professional bodies to which they belong" (clause 14 of the Deed).

The Deed therefore requires compliance with the Rules and the VIRM.

In this case certification of the drawbar was required by virtue of Rule 6.5(1)(d) of the Compliance Rule which states:

6.5(1) Specialist inspection and certification is required for the following specific aspects:

(a) ...

(d) subject to 6.5(3), heavy vehicle specialist inspection and certification by a person appointed under 2.2(1)(i), if the vehicle is a heavy vehicle that, since it was manufactured, or last certified for entry or for modification, has been modified so as to affect its compliance with an applicable requirement, including modifications to its chassis, brakes, log bolster attachments, towing connections or load anchorages;

Rule 6.5(5) of the Compliance Rule states:

6.5(5) A specific aspect of a vehicle may be certified for compliance with 6.5 if a vehicle inspector or inspecting organisation has identified the vehicle and has determined, on reasonable grounds, that the specific aspect:

(a) does not compromise the safe operation of the vehicle; and

(b) has been designed and constructed using components and materials that are fit for their purpose, and is within safe tolerance of its state when manufactured or modified; and

(c) complies with the applicable requirements; and

(d) has not suffered water damage as specified by the [Agency] under 11.1.

There is no suggestion that the vehicle suffered water damage, so paragraph (d) is irrelevant. The vehicle is safe, so paragraph (a) was fulfilled. Given that the vehicle is safe, we see paragraph (b) as being a more detailed description of paragraph (a), and hence is also fulfilled. Paragraph (c) requires compliance with "the applicable requirements". These are defined as being:

"any requirement specified or incorporated in an Act, regulation, code or rule listed in Schedule 1 that applies to the design, construction, condition, equipment, modification, repair or maintenance of a specific vehicle."

Schedule 1 does not include the VIRM. Prima face it seems as though the Respondent fulfilled the requirements of Rule 6.5(5) as he considered on reasonable grounds (being his knowledge of a similar design) that the drawbar was compliant.

Clause 19 of the Deed states that a certifier should:

Only inspect and Certify any Vehicle where they are satisfied that such inspection and Certification comply with the Rule and any requirements of this Deed and in the VIRM and are lawful. The HVS Certifier shall take all reasonable steps to ensure that no technically competent person (as recognised by the Director) would dispute that the Inspection and Certification and the Vehicle comply with the Applicable Requirements.

The VIRM is a lengthy document at 166 pages. It is described as a manual. Section 3.1.2, part 2 of the VIRM ties in with Rule 6.5(5). It states:

2. Determining compliance of a specific aspect (sections 6.5(5), 7.4 and 11.1 of the Rule)

A specific aspect of a vehicle may be certified as meeting the requirements of the Rule if an HVS certifier has identified the vehicle and has determined, on reasonable grounds, that the specific aspect:

a) has not compromised the safe operation of the vehicle

b) has been designed and constructed using components and materials that are fit for their purpose and is within safe tolerance of its state when manufactured or modified

c) complies with the applicable requirements.

As can be seen this is a direct repetition of Rule 6.5(5) save it excludes paragraph (d). The definition of "applicable requirements" is the same as in the Compliance Rule.

On the same reasoning as outlined above prima facie the Respondent satisfied this criteria.

However, the VIRM becomes more detailed. Section 3.6 states:

3.6 Establishing whether the vehicle aspect complies

The following steps must be taken in determining vehicle compliance:

Certifications by Engineer Certifier

1. Start a Procedure Documentation Sheet (PDS) for the vehicle.

2. Inspect the vehicle to be certified at a location that allows adequate access and equipment to allow a full and detailed inspection.

3. Record all relevant details and dimensions for the proposed or existing aspect of the vehicle that requires certification.

4. Collect all relevant information that is required for the certification of that vehicle aspect.

5. Compare what the vehicle owner/workshop wants to do with the relevant sections of the VIRM and ensure that no reasons for rejection will be invoked. If they are, the HVS certifier should advise the owner/workshop in writing.

6. Complete design drawings, specifications and calculations as required.

7. Complete a Certificate of Design Compliance, if required (see section 3.5), and supply it as well as all drawings and specifications required to complete the proposed work to the

workshop/vehicle owner. Suchinformation should include dimensions, materials and welding specifications.

8. Supply any drawings and specifications required to complete the proposed work to the workshop/vehicle owner. Suchinformation should include dimensions, materials and welding specifications as well as an inspection schedule from the HVS certifier.

9. Carry out inspections of the work as required. If the vehicle is presented fully completed, disassembly of certain parts may be required at the discretion of the HVS certifier. Compare the work against the requirements of the design drawings and specifications provided. The inspection should include the quality of materials and workmanship.

10. Compare the finished work and documentation against the VIRM for reasons for rejection and if any of the reasons for rejection apply, reject the vehicle for certification.

11. If the HVS certifier requires further information in order to determine compliance with the requirements, he must reject the vehicle until the information has been obtained.

12. Complete the PDS and issue an LT400 for the aspect that has been certified if no reasons for rejection exist.

The Respondent contends that he carried out these steps when he compared the design that was fabricated and installed against the standard design that he knew and had calculations for in the office.

The Appellant says that the Respondent cannot have carried out these steps because he was never in possession of the calculations for the actual fabricated and installed item.

There is one further provision of the VIRM that we should set out which is section 8.1.3 which states certification of a drawbar should be rejected when:

56. A full design stress analysis has not been completed or is unavailable.

The test for negligence

In *Complaints Committee of the Canterbury District Law Society v W* [2009] 1 NZLR 514 a full bench of the High Court was called upon to consider an appeal from a Law Society Disciplinary Committee. In that case the allegation against the practitioner was framed under section 106(3)(c) of the Law Practitioners Act 1982 and was that the practitioner:

... has been guilty of negligence or incompetence in his professional capacity, and that negligence or incompetence has been of such a degree or so frequent as to reflect upon his fitness to practise as a barrister or solicitor or as to tend to bring the profession into disrepute...

We appreciate that this adds a qualifier that is not present in the Act that we have to consider but we do not consider that this makes the reasoning of the High Court any less relevant in this case, nor any less binding on us.

In the *Canterbury Decision* the High Court said following its review of the previous authorities:

[82] ... We do think it is relevant to consider whether the conduct falls below what is to be expected of the legal profession and whether the public would think less of the profession if the particular conduct was viewed as acceptable.

...

[91] In our view it was negligence of a degree that tends to affect the good reputation and standing of the legal profession generally in the eyes of reasonable and responsible members of the public. Members of the public would regard the actions as below the standard required of a law practitioner, and to be accepted as such by responsible members of the profession. It is behaviour or actions which, if known by the public generally, would lead them to think or conclude that the law provision should not condone it, or find it to be acceptable. Acceptance by the profession that such negligence is acceptable would tend to lower the standing and reputation of the profession in the eyes of the general public.

So here, we consider that we have to assess the Respondent's conduct was such that it would tend to affect the good reputation and standing of Chartered Professional Engineers generally in the eyes of reasonable and responsible members of the public.

We consider that this test aligns well with the purpose of the Act which is:

... to reform the law relating to the registration of engineers and to establish the title of chartered professional engineer as a mark of quality; and, to those ends, this Act—

(a) establishes a registration system for chartered professional engineers, under which persons who wish to be chartered professional engineers must meet minimum standards to be, and continue to be, registered: [emphasis added]

We also note that the Act requires Chartered Professional Engineers to be currently competent. The standards against which Chartered Professional Engineers are assessed are those set out in under Rule 6. Subsection 1 states:

To meet the minimum standard for registration, a person must demonstrate that he or she is able to practice competently in his or her practice area to the standard of a reasonable professional engineer.

Subsection (2) of Rule 6 sets out 12 attributes that will be considered in making an overall assessment of competence. Of relevance to this appeal are the following:

(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

...

(d) exercise sound professional engineering judgement; and

...

(g) identify, assess, and manage engineering risk; and

We consider that these criteria can be read in conjunction with the test that was set out in the *Canterbury Decision* and can assist in directing us to consider what aspects of a Chartered Professional Engineer's practice we should have particular regard to in assessing whether disciplinary action should be taken or not in response to an allegation of negligence.

Submissions

In closing Mr Cooke QC posed two questions for the Appellant.
Was the work consistent with NZTA requirements; and
If it was not consistent was it proof of misconduct.
Under the first question the Appellant's argument was that the VRIM is a manual, and should be seen in that context. What was important in this case was that the Respondent had not complied with the system of certification. The Deed in particular is prescriptive and results from a statutory appointment under the Act, it was clear that section 8.1 of the VRIM had not been complied with as there was not a full design analysis of the fabricated drawbar *completed or available.*
Mr Cooke QC developed an argument that the real difficulty for the Council if it dismisses the appeal is that it would mean that it would be a signal that it is acceptable for a Chartered Professional Engineer not to meet the NZTA requirements which were the regulatory requirements that they signed up to.
He referred to the evidence of the Respondent which was essentially that he was able to use engineering judgment to be able to certify that the vehicle was safe, and that Mr Bishop a Chartered Professional Engineer, called as an expert for Mr Smith, agreed that this meant that the requirements of the NZTA were not necessarily met.
Mr Bullot was called because the disciplinary committee did not know what the regulatory requirements were. Mr Bullot clarified what these are and that they have been breached. He was particular that a calculation sheet was required for every job.
Mr Cooke QC also pointed out that while NZTA engage in a process of audits, and that they issue clarifications and practice notes from time to time, there was no evidence from the Respondent that his practice of using engineering judgment had been approved.
In summary Mr Cooke QC argued that the professional standards are not different from the regulatory requirements, particularly when a Chartered Professional Engineer is being asked to certify a design.

Mr Salmon for the Respondent contended that there were some "bright lines" between what the NZTA requirements are and what are the rules and requirements for a Chartered Professional Engineer. He contended that this was a complaint by a competitor of the Respondent that was pursued with a degree of enthusiasm that it never justified. The result is that by the time the hearing concluded the issue was more about the clarification of the two sets of obligations – NZTA and CPEng – and how they mesh.

Mr Salmon went on to say that the chief concern was safety, and that this was appropriate because it is a core concern of the test for negligence. He went on to say that the law dealt with numerous cases where a code has not been complied with and no negligence was found. He stated that Mr Bullot's interpretation of the VRIM was such that it was permissible to have a design envelope within which a design could be approved as being within. While Mr Cooke QC had said that the certification required a design regardless, that is a "box ticking" exercise and not a true test of whether conduct has been negligent or not. In short, he was submitting that Mr Bullot's view is not the test for negligence.

In summary Mr Salmon's position was:

That the Respondent drew on his vast knowledge of the area, and issued a certificate based on his engineering judgment. So if there was to be a finding of negligence it could only be because he did not meet what Mr Bullot's interpretation of the rules was, and further, that cannot have been known to anyone until Mr Bullot wrote it down for this hearing.

That the Respondent took the permissible course of certifying on the basis of a design envelope and that is what he did.

The complaint has shrunk and the allegation now is that the Respondent has not followed to the letter the requirements of the VIRM and this cannot be negligence.

In response to this Mr Cooke QC stated that the VIRM was not a code of practice, but a set of regulatory requirements and under Deed the Respondent was required to comply with those requirements and on that basis there cannot be a difference between the standard of care owed in negligence and the code of practice.

Discussion and Findings

As this hearing progressed it became clear to the Appeal Panel that the essential issue is whether it is necessary for a Chartered Professional Engineer to follow the process outlined in the VIRM when reaching a conclusion on whether to issue a certificate.

The complaint is not addressed to the Respondent's design ability. While at the start of the appeal hearing the Appellant produced a review of the Respondent's design calculations for the drawbar on which the Respondent based his assessment of the

actual drawbar that was certified which suggested that there was an error in someone's calculations, it was later accepted (voluntarily) by the Appellant that it was his assessment of the figures that was incorrect.

So no issue arises as to the Respondent's design competence. In respect of this we have no evidence that the Respondent's design analysis, on which he relied when giving his certification, was at fault. Indeed, the evidence is that the design analysis was appropriate.

This means that it is the Respondent's role as a "certifier" that is in question not his design ability. We note that the "I" in VIRM stands for "Inspection". It is not a design manual.

Section 8 of the VIRM is an inspection check list. The statement under item 56 is a requirement that a stress analysis has been carried out at some time, we do not read this as being a requirement that one is done at every time and immediately prior to a certification being given. Stress analysis is a "design" activity not an "inspection" one.

Just as an experienced inspector can look at something and know it is "wrong", they can also know it is "right". This was confirmed to us in the evidence of Mr Bishop when he stated:

The difference between the two roles of a CPEng and a heavy vehicle certifier. I mean when I go and look at a job I can tell pretty much ... there's really only two categories they fit into. Either it's a home job that someone's put together and you can tell almost instantly that it's not going to work, or it's been done to some design or other. In that one sort of look you can tell pretty much if it's going to work or not. That's the second side of things. You can tell how it's going to come out, because of the safety factors involved, because of the industry standards that everybody does it to, but then as a heavy vehicle certifier, the common perception is that when it comes to NZTA's interpretation of the VIRM when it comes to what they look at when they audit, they want to see calculation sheets for every job. So then it's just a question of how do you do that in a timely manner, because to make the job profitable you've probably got about a quarter of the time you took to question

It was also clear to us from the evidence of the experts that the NZTA would accept that calculations had been done for a "design envelope" and that a certified design fell within that envelope in which case it would be appropriate to issue a certification. The following exchange took place between Mr Read and Mr Bullot[1]:

???[AR] So if you've done a stress analysis for the range of bolts going that way and that way and you've come up with anything within this ...

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[1] We note that the initials of Mr Read and Mr Bullot have been inserted by the Appeal Panel after the transcript was circulated to the parties.

???[SB] Within that design envelope ...

[AR] It is safe.

??? [SB] I would accept that as long as it was referenced and it was available to the NZTA at the time of audit.

??? [AR] So if the ... of the acceptable design envelope ... recalculations.

??? [SB] Yes. I wouldn't have a problem with that at all.

??? [AR] So if I'm a heavy vehicle certified engineer and I have done a range of calculations on various configurations that enable me to get a volume within which I can work and I'm happy that anywhere within certain constraints the outcome will be something that will comply, I have a generic range of ... I don't have one specific to the particular vehicle but I know that my vehicle's within the generic range, I can refer to that generic range of drawings and calculations.

??? [SB] Yes.

??? [AR] So we've got the situation where earlier you said we needed specific design calculations if we vary from the norm. We're creating a norm by some pre-calculation ...

??? [SB] Well it is specific to the vehicle when you ... you've done your generalised envelope. You then come to your vehicle, identify what part of the envelope, whether that would fit in that envelope, then specified the dimensions, and then refer to that envelope. Because it fits within that envelope.

??? [AR] So I wouldn't have to do a specific recalculation of the vehicle, I'd just need to be reasonably sure that it fitted within that envelope.

??? [SB] I'd say you'd have to be positive that it fitted in the envelope.

??? [AR] So if it fits within the envelope – again I'm trying to raise that in this case, TSV have a range of solutions, 42 different solutions, that I think Mr Smith is saying give him confidence across a range of designs that in particular solutions he might see would fit within the envelope.

??? [SB] Quite possibly, but I didn't seen any evidence that he'd actually done that work to have assured himself of that prior to doing the certification.

From this exchange, and from Mr Bullot's earlier candid admission that safety was not an issue, it is clear to us that the NZTA's issue is with the quality of the paperwork.

We agree that the quality of the paperwork could have been better, but we think is an issue for the NZTA and its process. We had it confirmed to us during the hearing that NZTA was conducting its own investigation to see if there had been breaches of the Deed.

We do not think that we can elevate the Deed to the status of a regulation. It is a document promulgated as a consequence of regulation, but it is not regulation itself. It is in essence a private agreement between NZTA and the Respondent. In that

way we consider that it is quite possible that a Chartered Professional Engineer discharges his or her obligations according to the standards required by the Act, but could still be in breach of the Deed by not meeting some prescriptive contractual requirement. If that is the case here then it is a matter for the NZTA and not us. As the matter is currently before the NZTA it is sensible that we say no more about our views on the Compliance Rule, the VIRM and the Deed and how those documents are read.

In the circumstances we conclude that the Respondent was not negligent in carrying out the certification in the manner in which he did. He recognised the design, he knew that he had calculations that provided for that design, albeit within a tolerance of that design, and that meant it was safe, and indeed it is safe. We do not think that his process would tend to affect the good reputation and standing of Chartered Professional Engineers generally in the eyes of reasonable and responsible members of the public. It may lower his good reputation and standing in the eyes of NZTA (and that has not yet been determined), but that is not the test that he has to meet to discharge his obligations.

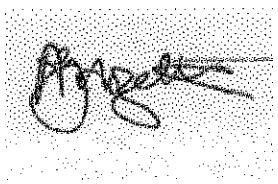
Outcome

The appeal is rejected. The complaint is not upheld.

This decision which does not identify the parties may be published by the Registration Authority.

Dated this 17th day of December 2012

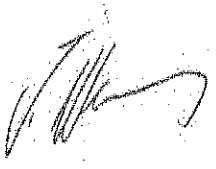
Andrew Hazelton
Principal



Andrew Read

Jane Nees

Jon Williams



Roly Frost