

General Practitioners July 2024 Newsletter

Welcome to the second newsletter for 2024.

In this quarter's newsletter we have some important information if you are chartered in more than one practice area, that many do not seem to be aware of. We have a great article from Engineering NZ on common issues with PS4's and a good lesson learnt regarding excavations around retaining walls and what you should be looking at when designing retaining walls.

There have been some great discussions on our Slack channel with lots of information being distributed. It is such a great tool and so wonderful to see engineers helping each other and providing responses. Have a look at our summary for the last quarter later in the newsletter.

Don't forget to share your photos of any interesting jobs you have done for others to view on Slack, or submissions can be emailed to <u>general.practitioners@engineeringnz.org</u>. Also, I would like to **encourage you all to submit your lessons learned for inclusion in our upcoming newsletters.** This is anonymous and a great tool to help other engineers to not repeat the same mistakes. We are also asking for you to submit photos that you think best describe Engineering General Practice, so that we can showcase exactly what we as EGPs do.

Tamlyn Adams, Editor

In this issue:

- Message from the Chair
- The EGP One Question Survey
- Learning Opportunities
- EGP Slack Channel Update
- Chartered in Mutiple Disciplines Requires additional CPD hours per year
- Upcoming EGP webinars and what to expect
- For a Laugh

Message from the Chair

Welcome again to our latest newsletter,

It looks like we have struck a chord with a lot of you with our latest webinars. It is great to see the large numbers who registered. The number of people who tuned in on the day was almost double our membership, so it is great to see that the EGP word is spreading.

If you are looking to catch up on some of our previous webinars, you can access these via our website, along with our past newsletters and other useful resources.

Our previous Chair has been working on how we can define and differentiate the role of an EGP, with the aim of gaining recognition of EGP at a CPEng level. A task which we hope to see exist across all disciplines, not just in the building and construction industry that we are currently most prevalent in.

If you know any engineers in other fields who are struggling with the disconnect between highly technical and specialised fields and work involving a broad understanding and solutions that draw on knowledge and understanding across multi-disciplines, then I strongly encourage you to send us your thoughts on this via the email address below.

A few of you should have received the email notification for the recurring dates where the EGP engineers are regularly catching up in various regions. As I've said before, if you would like to set one up in your region and haven't heard anything, please also get in touch.

Wishing you all well, for the rest of the winter season,

Kelly Pilkington

Chair

general.practitioners@engineeringnz.org

The EGP One Question Survey

This issue, we are asking Engineering General Practitioners:

Do you think the government's proposed changes for fast-tracking consents is going to be a good thing for the industry?

- Yes, I don't think it will affect the quality of works or affect engineering much
- No this is a disaster waiting to happen with contractors likely to take shortcuts
- Other provide comment



In the last issue we asked:

The construction sector has been experiencing some difficult times lately. As an engineer you may have missed out on work recently due to a more competitive bid. Which of the following best describes your attitude towards pricing work in a downturn?

ANSWER CHOICES	RESPONSES
If you 'buy work' or undercut your competitors to keep staff busy you are	80.65%
ultimately just harming the profession and de-valuing what we as engineers	
do. Smaller fees also result in poorer engineering design.	
Competitive bidding on work is just a means to improve efficiency in the industry and remove the dead wood. There needs to be an incentive to do things better, cheaper and faster otherwise we as engineers don't develop	19.35%

It is good to see majority agree that dropping prices is not good for the industry, but what do you do when you just can't get work? I have noticed some scary prices being offered to clients and my concern is what they are getting, engineers are either working at a loss, or providing poor quality work that has been rushed in an attempt to not lose too much on the job. Let's hope the industry, especially structural starts to pick up again soon, we need more houses built in any case.

Learning Opportunities

The biggest opportunities to learn from are not when things go right, but when they go wrong. The best way to learn from your mistakes is to recognise what went wrong and how you (and others) can avoid making the same mistake again.

Click on the links below to read some anonymous Learning Opportunities submitted by two different contributors:

- 1. Excavations in front of retaining walls
- 2. Works Over Check before build

Do you have a learning opportunity that would be of interest to your fellow EGP members, please submit your examples for others to learn from? Download the Learning Opportunities form <u>here</u> and send it to <u>egp.sig.anonymous@gmail.com</u>

EGP Slack Channel Update

Nick Calvert

The EGPSIG Slack channel provides a useful forum for technical discussion. The committee recommends that all our members are active on the slack channel. Follow this link to sign up and install the <u>EGP Slack Channel</u>. If you have any issues or questions regarding the Slack channel, feel free to email your questions to <u>tech.groups@engineeringnz.org</u>.

As posted on the Slack Channel, due to very high charges from Slack, we have had to reduce the number of channels to one. We would encourage everyone to post all content into the one general slack channel.

The following is a short summary of the topics covered since last update:

 Discussions on ISA's for URM BUILDINGS and ductility values used in ISAs for other building types..

- Building Act compliance pathways for storage tanks
- Liability period following signing a PS4
- Concrete driveways and TA requirements
- Guidance on the repair of flood damaged houses.
- Guidance on shear friction between concrete interfaces Hilti webinar presentation notes.

Missed any topics of interest to you? Have a look back on the Slack Channel to see what was discussed.

If you have any interesting photos from your EGP jobs, share them on the EGP-Photos Channel on Slack. Great to see what we are working on out there.

We ask all members to continue to be active on the Slack channel because the more activity, the more beneficial the content is for everyone. If you missed out on any of these, go have a look at the discussions and feel free to add your input.

Chartered in Multiple Disciplines Requires Additional CPD Hours Per Year

Tamlyn Adams

As Engineering General Practitioners, we often work in more than one engineering practice area, but you may not be aware that if you are chartered, or plan on being chartered in more than one area you will require additional CPD hours per year to those who are just chartered in one field.

In January 2023, the Registration Authority released a document titled "Continuing Professional Development Requirements for CPEng. The document outlines what counts as CPD, defining acceptable CPD and how to record CPD. The document states, on page 3, that "if you are applying for more than one practice field, you will need an additional 15 hours per year of CPD for **each** additional practice field".

A minimum of 40 hours per year of CPD are required, with 15 hours allocated to your specific practice field. That means that 25 hours can be made up across different categories, such as health and safety, risk management, ethics and business processes to name a few and the other 15 hours to your practice area. If you are chartered in two practice areas you require 15 hours in each area additional to the mandatory minimum 25 hours (total of 55 hours) and this will add on for all further practice areas.

See below the Registration Authority document for further information.



Common Issues with PS4

Engineering New Zealand

I find that queries from members and regulators come in waves. Currently, I'm getting a lot of queries about completing PS4 – Construction Review. There can be misunderstandings by engineers and regulators about what is required. In this article, I'll work through the top queries and provide answers.

No accompanying inspection schedule or construction monitoring reports to the PS4

Under section 94(1) of the Building Act 2004, the regulator needs to be satisfied "on reasonable grounds" that the work completed meets the conditions of the consent. Typically, they need assurance that the work has been checked. That assurance typically means providing the construction monitoring schedule along with the construction monitoring reports for each item (including photos). Examples of construction monitoring reports and a template can be downloaded from the Guidelines section of the Engineering New Zealand website.

Minor variations (by site instruction) are not detailed enough or are outside the scope of a minor

variation.

The boundary between when work is considered a minor variation (no change to a building consent is required) or an amendment can be blurry. Even Councils have been caught out by misunderstanding the regulations. MBIE has published guidance on where an amendment is required which is worth reading. It's worthwhile noting that the guidance states the variation must be approved by the Council Inspector **before** the contractor constructs the changes.

In the same way we need to provide enough information in our initial drawings for the project to be approved and constructed, we need to provide the same level of information in a site instruction. Site instructions can be issued as hand-drawn sketches accompanied by calculations, provided that the details contain the appropriate level of information for the contractor to build from and the regulatory authority to ensure the variation will comply with the Building Code.

Any site instruction documentation needs to be compiled and provided with the construction monitoring reports and PS4.

Can another engineer sign the PS4?

It doesn't have to be the design engineer who signs the PS4. It simply needs to be a CPEng (NZ) who is competent (typically with the same practice field) to check the constructed work meets the consented documents. The engineer will need to have either monitored the work themselves or have access to a level of documentation sufficient to satisfy them the work does meet the consent conditions. When calculating a fee to provide a PS4, it's worth considering the potential liability you are attracting as well as the time taken to complete the paperwork.

The council/client is demanding a PS4, but I didn't contract to provide one.

Many engineers assume this becomes their problem. If you aren't comfortable with providing a PS4 because the client didn't want one, or because you weren't contacted for construction monitoring, it is not your problem to deal with. You can be helpful, but you are only obliged to undertake the contracted work.

Something I have learned is to write the conditions of the PS4 being issued into the Short Form Agreement. Those conditions could be that:

- The required construction monitoring must be completed,
- the final bill must be paid before the PS4 is issued, or
- the PS4 will only be issued within a specified timeframe after construction is complete.

I'm not CPEng, can I sign a producer statement?

Only a CPEng who has been assessed in New Zealand can sign Engineering New Zealand producer statements. Chartered Members (CMEngNZ) or Members (MEngNZ) cannot sign these producer statements. Only a CPEng (NZ) has had their general competence assessed and proven their knowledge of New Zealand specific regulations and guidelines to the standard that will enable a consenting authority to be satisfied "on reasonable grounds" that the completed work complies with the consent. Producer statements that are not signed by a CPEng (NZ) are unlikely to be accepted by a consenting authority. CPEng (NZ) are also deemed to be Licenced Building Practitioners under the LBP Rules (2007). That has implications for the consent when working on residential projects.

Engineers who have been assessed in other countries (e.g., Australia) cannot sign these producer statements unless they have also been assessed in New Zealand.

Should I sign a PS4 for work that doesn't require a building consent?

No. The standard producer statement series is used for work that requires a building consent. For any other projects you should use the producer statement A series. A good example is exempt building work.

What if I issue a PS4 or conduct construction monitoring before there's a building consent?

If a project requires a building consent, it is an offence under section 40 of the Building Act 2004 to carry out building work if a building consent has not been granted. Engineers have been disciplined for undertaking construction monitoring work and signing PS4s without a valid building consent. It is the responsibility of the engineer to see the consented drawings before undertaking work.

- <u>Guidelines</u>
- Minor variations to building consents: Guidance on definition, assessment and granting
- <u>ACE New Zealand and Engineering New Zealand Producer Statements A Series</u>
- Building work that doesn't need a building consent
- Building Act 2004
- Inspecting unconsented work
- <u>Determinations</u>

Upcoming EGP Webinars

The EGP has recently been rolling out a few great webinars for our members with a few other exciting ones lined up, we recently had a webinar on retaining walls with an outstanding number of attendees, make sure you do not miss part two on Wednesday 17 July. Below are some webinars that may be of interest to our members coming up soon, otherwise please refer to the Engineering New Zealand link below for a full list of upcoming webinars:

Date

17/07/2024	Embedded Retaining Walls – Online Course
18/07/2024	Timber Design Society 2024 Series - 6
25/07/2024	Fire Design of Post-installed Rebar Applications
25/07/2024	Temporary Works Forum - Auckland

The EGP is embarking on a series of Webinars over the next 12 months that focus on general topics: Tips and Tricks for GP Engineers. I hope you managed to see our Webinar on "**On Site Wastewater treatment and Disposal**" on the 13 March. If not, this will be put up on our website in a few weeks' time.

As a voluntary committee, we want to bring you quality content to support your work as a General Practitioner and we hope you'll join us for our next webinar. If you have ideas for future webinar topics, please get in touch, we would love to hear from you.

If you missed any of the previous EGP webinars, you can watch it through the link below:

