

October e-news

Issue 50 2018

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Welcome to our newest RPEQs



BOARD OF
**PROFESSIONAL
ENGINEERS**
OF QUEENSLAND

A WORD FROM THE REGISTRAR

One of BPEQ's core functions is to investigate engineers for breaches of the PE Act (e.g. unregistered practice) or the Code of Practice (e.g. not carrying out a professional engineering service to a standard).

Often RPEQs are reluctant to make an official complaint about a peer. This is understandable to a degree but means that important information and learnings about an engineering product or services gone wrong is not always known. Earlier this month I met with representatives of the Institution of Structural Engineers (IStructE) to discuss the launch of Confidential Reporting on Structural Safety – Australasia (CROSS – AUS) system. IStructE believe this system will help improve information sharing about structural failures and improve safety standards. More information about CROSS – AUS is available in this e-news issue.

The Board member feature article in the October e-news has been written by Sarah Hansen and focusses on benefits of mentorships to individuals and companies. Sarah is a firm believer in mentorships and has benefited herself from having had mentors during the early stages of her career. No doubt many RPEQs would say a similar thing.

Direct supervision is, in a way, a form of mentorship and ensures that young engineers are given appropriate direction, oversight and evaluation.

In November, BPEQ staff will take to the road to visit Emerald, Blackwater and Middlemount for a series of seminars on the PE Act and RPEQ system with local engineering firms and mining companies. The seminars run for an hour (including time for questions) and can be counted as CPD.

To request a seminar for your workplace contact BPEQ at admin@bpeq.qld.gov.au

Finally, **BPEQ's Annual Report for 2017/18** was tabled and published recently. The Annual Report provides a comprehensive performance and financial review of BPEQ in the last financial year.

We trust you enjoy and find the e-news useful; and please feel free to contact BPEQ at admin@bpeq.qld.gov.au or call 07 3210 3100 if we can assist you.

KAINE BARTON
A/Registrar



MENTORING KEY TO PROFESSIONAL AND PERSONAL GROWTH

BPEQ COMMUNITY REPRESENTATIVE

SARAH HANSEN

DISCUSSES THE BENEFITS OF MENTORING FOR INDIVIDUALS AND COMPANIES.

I was honoured to be recommended by the National Association of Women in Construction for appointment to the Board of Professional Engineers of Queensland as the community representative. As a young female in the construction industry, I have been a strong advocate for women in both construction and engineering. My appointment to the Board was exciting, but also daunting. However, not stepping outside of my comfort zone would have seen me miss a great opportunity for professional and personal development.

I have been lucky to have had great support and encouragement throughout my career. Something that has helped me enormously when it comes to stepping outside my comfort zone and taking opportunities was mentorships.

Mentorships are invaluable for someone starting out in their chosen career, connecting them with a more experienced peer. A mentoring relationship does not necessarily have to be a formal arrangement between a junior person and someone more senior from the same company, but many companies recognise the value mentorships bring in terms of performance, productivity and innovation. This is supported by a 2016 report from the Centre for Workplace Leadership that found 71 per cent of Fortune 500 companies have mentoring programs.

A five-year study of 1,000 employees found that:

- 25 per cent of employees who enrolled in a mentoring program had a salary-grade change, compared to only 5 per cent of workers who did not participate

- Mentees are promoted five times more often than those not in a mentoring program
- Retention rates were higher for both mentees (22 per cent more) and mentors (20 per cent more) than for employees who did not participate in a mentoring program

(Gartner 2006)

For CEO's in formal mentoring programs:

- 84 per cent said mentors had helped them avoid costly mistakes
- 84 per cent said they become proficient in their roles faster
- 69 per cent said they were making better decisions

(Harvard Business Review 2015)

Research also shows:

- Millennials intending to stay with their organisation for more than five years are twice as likely to have a mentor (68 per cent) than not (32 per cent)
- Participants are 40 per cent more likely to achieve their goals if they write them down. This increases to 70 per cent if the goals are shared with someone to keep them accountable, such as a mentor
- 89% of those mentored, go on to be mentors themselves contributing to a culture of learning and mentoring

(McCarthy Mentoring 2017)

Finding and approaching a potential mentor can be a daunting thing. First, it is important to find a mentor you feel comfortable with; you want to be able to approach them openly for advice and share things with them that you would not necessarily share with another colleague or peer.

It is equally important to seek out a mentor that can provide guidance and knowledge about things that are relevant to your career. Engineering is one of those professions with very distinct areas of expertise. For that reason, you may find yourself having different mentors for different reasons. It might be that you do not need a mentor for technical reasons, but someone who can help your 'soft skills,' like emotional intelligence (EI). With the increase in automation and robotics, pure technical skills will need to be complemented by strong human qualities such as EI. Finally, for a mentorship to be useful there should be agreement on how the relationship will work – i.e. how often will the mentor and mentee meet; what do you both want to get out of the relationship, how long will the mentorship be for?

Over the years we have seen a steady growth in the number of female RPEQs. Mentorships and role models will play an important role in attracting and keeping more women in engineering. In 2018, the Workplace Gender Equality Agency showed that while the percentage of females in engineering continued to sit at 20 per cent; females within management roles, especially CEOs/heads of business, increased. This is a huge step forward in itself, but it also opens a new and expanding source of knowledge and inspiration for women in engineering.

My advice to all young men and women starting out in engineering is to seek out mentorship opportunities. Even if your employer does not have a dedicated program, more experienced peers often give their time to help develop up and coming professionals. Mentorships help professional and personal growth, but also contribute to the performance, productivity and innovation of companies.

SARAH HANSEN

Sarah Hansen is the Board's community representative, appointed in July 2016. She started her career as an estimator in 2003, before progressing to contracts administrator and project manager. Sarah has successfully delivered over 33 projects for major supermarket chains, religious organisations, education providers, government and other commercial entities. Sarah is known for her pragmatic and collaborative approach to building and has developed a good reputation and positive working relations with a range of stakeholders. During her time in the construction sector she has worked for some of Queensland's major construction firms.



THE PE ACT FOR CORPORATIONS, COMPANY OFFICERS, MANAGERS, LOCAL AND STATE GOVERNMENT



Corporations, corporate officers and managers can face prosecution and financial consequences of non-compliance with the PE Act writes BPEQ Principal Legal Officer Jacinta Ricketts.

The Professional Engineers Act 2002 (*PE Act*) requires that individuals who carry out professional engineering services must either be a registered professional engineer of Queensland (*RPEQ*) or be directly supervised by a RPEQ. However, the PE Act also applies to corporations and their officers (e.g. directors), managers and other persons who procure or direct persons to carry out professional engineering services.

Potential Criminal Responsibility

It is an offence under section 115 of the PE Act¹ for a person to carry out 'professional engineering services' if the person is not a RPEQ nor directly supervised by a RPEQ (unless the professional engineering service is carried out only in accordance with a 'prescriptive standard'²). At law, a 'person' includes a corporation. This means that a corporation can also be found guilty of this offence where a court finds the corporation criminally responsible for the unregistered person/s carrying out professional engineering services.

Similarly, the Criminal Code of Queensland provides that another person can be found guilty of this offence where they aid, counsel or procure³ a person to commit that offence or where they have 'common purpose' with another person to commit that offence⁴. These provisions in the Criminal Code are

sometimes referred to as the 'extensions of criminal responsibility'.

For this reason, corporations, corporate officers and managers who have persons in their corporation or team who carry out professional engineering services should be aware of the requirements of the PE Act and the offence provision in section 115 of the PE Act.

The law relating to corporate criminal responsibility and extensions of criminal responsibility is complex and BPEQ is unable to give legal advice in relation to it. Corporations/corporate officers, principals of engineering firms and managers may wish to seek legal advice regarding their responsibilities under the PE Act and their compliance with the same.

Corporations and managers who require their staff to carry out professional engineering services should ensure that their corporate and/or team structures contain sufficient RPEQs (who are registered in the area/s of engineering which apply to services being carried out) to directly supervise unregistered engineers or other unregistered persons who carry out professional engineering services.

Financial and other Legal Implications

Companies and individuals should also be aware that where unregistered person/s carry out professional engineering services without direct supervision, the person/s, firm or corporations may not be entitled to be paid for those services irrespective of any contract requiring payment. See section 141 of the PE Act and Supreme Court decisions in *Agripower Australia Ltd v Queensland Engineering & Electrical Pty Ltd & Ors* [2015] QSC 268⁵.

There may be other financial and legal risks of using unregistered persons to carry out professional engineering services – a report which involves professional engineering services is relied on to justify a decision with legal implications (e.g. whether to approve an insurance claim or whether to pay money under a contract). If the person who provided that report is not a RPEQ (nor was directly supervised by one) that decision may not hold up on review by a court or other review authority because the person who provided the report was not legally entitled to carry out professional engineering services in or for Queensland.

BPEQ regularly conducts seminars to industry (free of charge) in which it provides general information regarding the requirements of the PE Act and information regarding RPEQ registration. The seminar runs for an hour (including time for questions) and can be counted as CPD. If you would like BPEQ to present to your corporate officer, manager or staff please contact BPEQ's Communications and Media Adviser.

¹ See section 115(1) of the *Professional Engineers Act 2002 (PE Act)*.

² For guidance as to the meaning of 'professional engineering service' and 'prescriptive standard' see the definition in Dictionary, Schedule 2 of the PE Act and Board Practices notes regarding same (available under the 'resources'/'practice notes' tab on BPEQs website).

³ See Criminal Code (Qld):

Section 7 Principal offenders

(1) When an offence is committed, each of the following persons is deemed to have taken part in committing the offence and to be guilty of the offence, and may be charged with actually committing it, that is to say:

- (a) every person who actually does the act or makes the omission which constitutes the offence;
- (b) every person who does or omits to do any act for the purpose of enabling or aiding another person to commit the offence;
- (c) every person who aids another person in committing the offence;
- (d) any person who counsels or procures any other person to commit the offence.

(2) Under subsection (1) (d) the person may be charged either with committing the offence or with counselling or procuring its commission.

(3) A conviction of counselling or procuring the commission of an offence entails the same consequences in all respects as a conviction of committing the offence.

(4) Any person who procures another to do or omit to do any act of such a nature that, if the person had done the act or made the omission, the act or omission would have constituted an offence on the person's part, is guilty of an offence of the same kind, and is liable to the same punishment, as if the person had done the act or made the omission; and the person may be charged with doing the act or making the omission.

⁴ See Criminal Code (Qld):

Section 8 Offences committed in prosecution of common purpose

When 2 or more persons form a common intention to prosecute an unlawful purpose in conjunction with one another, and in the prosecution of such purpose an offence is committed of such a nature that its commission was a probable consequence of the prosecution of such purpose, each of them is deemed to have committed the offence.

⁵ **141 Performance and carrying out of professional engineering services by particular entities**

(1) This section applies to—

(a) a person who is not a practising professional engineer if the person, in performing, or undertaking to perform, professional engineering services for someone (the client)—

- (i) claims, or holds himself or herself out, to be a practising professional engineer; or
- (ii) allows himself or herself to be held out as a practising professional engineer; or

(b) another person if—

- (i) the person, in providing, or undertaking to provide, professional engineering services for someone (also the client) claims, or holds out, that the services are carried out, or to be carried out, by or under the supervision of a practising professional engineer; and
- (ii) the services are not carried out by or under the direct supervision of a practising professional engineer who is responsible for the services.

(2) Despite any agreement between the person and the client, the person is not entitled to any monetary or other consideration for the performance or carrying out of the professional engineering services.

(3) For this section a person carries out professional engineering services under the direct supervision of a practising professional engineer only if the engineer directs the person in the carrying out of the services and oversees and evaluates the carrying out of the services by the person.

UPCOMING CPD COURSES AND CONFERENCES

To include an upcoming CPD course in the e-news contact BPEQ's **Communications and Media Adviser**.

ENGINEERS AUSTRALIA

Transitioning from Manager to Leader

Brisbane: 7 November

Certificate IV in Procurement and Contracting (12-month online qualification)

Brisbane: 12 November

Diploma of Project Management (12-month online qualification)

Brisbane: 12 November

Writing Winning Technical Documents

Brisbane: 15 and 16 November

IPWEAQ COURSES

Critical Risk Management Workshop

Rockhampton: 8 November

Townsville: 22 November

Basic Geometric Road Design Workshop

Brisbane: 8-9 November

Rockhampton: 22-23 November

Administration of Construction Contracts Workshop

Cairns: 26-27 November

Tender Administration

Brisbane: 13-14 November

Bridge Inspection Workshop Levels one and two

Brisbane: 20-22 November

Managing Unsealed Local Roads Workshop

Gatton: 29-30 November

Erosion and Sediment Control Level 3, Advanced Training

Brisbane: 27-29 November 2018

Type A, B & D Sediment Basin Design Course

Brisbane: 29 November 2018

CONFIDENTIAL REPORTING SCHEME FOR STRUCTURAL SAFETY ISSUES LAUNCHES IN AUSTRALIA

Confidential Reporting on Structural Safety – Australasia (CROSS – AUS) is a reporting system established to capture and share information about structural safety issues in an effort to help prevent future failures.

The confidentiality of the system will ease concerns about co-worker relations, client loyalty and attributing blame, while also ensuring that critical information and learnings are shared amongst structural and civil engineers. A reporter's personal information and identifiable details, such as name, company, project and product are not shared publicly. Anonymised reports will be made available to the public through a database and CROSS – AUS will publish quarterly newsletters, with reports and comments from its Expert Panel.

The utility of the systems depends on the participation of individuals and companies. Structural failures and collapses, or safety concerns about the design, construction or use of structures can be reported through CROSS – AUS. Information about near misses, or observations relating to failures or collapses which have not been uncovered through formal investigation can also be reported.

The CROSS system is modelled on techniques developed in the United States for the aviation sector. The system has been in use in the United Kingdom since 2005 and has helped bring about improvements in safety processes and culture. An international CROSS system was recently set up which will facilitate greater information sharing from country to country. CROSS – AUS is managed and run independently by a team of structural and civil engineers.

For more information visit www.cross-aus.org.au.



AUSIMM SQSC AT NEW LEADERS CONFERENCE AND NATIONAL MINING GAMES



Since 2015, BPEQ has established sponsorship agreements with several engineering student societies, including the AusIMM Southern Queensland Student Chapter (SQSC).

BPEQ is proud to sponsor the SQSC and support their members to attend industry events to assist their professional development. SQSC President Courtney Dobson talks about the student's time at the recent AusIMM New Leaders Conference and the National Mining Games.

The SQSC sent 19 student delegates to Sydney, the largest group of students from any chapter. We were treated to an engaging two days at the New Leaders Conference, where our leadership styles were influenced and our vision for the future of the industry challenged.

Following the conference, the SQSC had two men's teams and one women's team compete in the National Mining Games at UNSW. 2018 is the first year that a women's division has been included in the national competition, having previously only been included in the international competition. All students performed exceptionally well, giving every event their all and making the SQSC proud. To everyone's excitement, the SQSC women's team won seven of their eight events, taking out the competition.



As a woman in mining, it was exciting to see the inclusion of the women's division this year, witnessing the progression of our industry first hand. Even more, it was humbling being a part of the winning team and I sincerely hope the division continues to grow in the future.

I would like to extend a big thank you to BPEQ for being one of our silver sponsors for 2018. Without your support, students would not be able to attend amazing events like New Leaders Conference and National Mining Games. All students proudly wore the BPEQ logo on both our conference shirts and competition drill shirts. Across this year I have seen students network with BPEQ representatives, discovering the importance of the organisation and the responsibilities we have upon graduation. The SQSC's successful year would not have been possible without BPEQ's help.

WELCOME



WELCOME TO OUR NEWEST RPEQS

BPEQ extends a warm welcome to the following engineers who recently became registered:

Reagan CASE	Jason HOWARD	Richard KLOEDEN	Peipei CHEN
James PENMAN	Brendan PRESTON	Chandra MUPPALANENI	Mohsen GHASEMIAN
James BARBATO	Edward ROWE	Richard JOHNSON	Manoj MUTHU
Mark PICKERING	Therese BROOKS	Matt GLENN	Hossameldin AHMED
Joanna DAWSON	William BEVAN	Joseph RUSTOM	Rola SABAH
Justine PARAGREEN	He ZHANG	Tariq KHAN	Huseyin UZUN
Jing LIU	Chris TOFT	Francis DICKENSON	Mazin QADAH
Ben McGloin	David McNALLY	Roy JAZAYERI	Mohamed ELGAD
Eric LAU HING FUT	Jason O'CONNELL	Steven WONG	James HARCOURT
James NAYLOR	Qing YI	Batanai PFUMAYARAMBA	Mitchell BLYTH
Xiao Hui YU	Roshan ANANDAPPA	Marcos MOSAAD	Ahmed HESHAM
Suchismitha PRABHU	Kechao LIANG	Lachlan SWANN	Sheng DING
Laura FOIS	Dominic HOWE	Vichwanath GURUSAMY	Lei CHEN
Qing ZHU	Charith ARUNACHALAM	Rade TERZIC	Roman BEREZHNYI
Alistair JONES	Arafat ALI	Dugald GRAY	Harpreet Singh
Tayyab REHMAN	Darren HEWETT	Partha SINHA	Ikechukwu LEWIS
Randall BAXTER	Prabhath PALLIYAGURUGE	Julian MARTIN	Ashwin MAHARAJ
Vinoth BHARATH KUMAR	Tien-Yu HUANG	Liam SACCO	Paul REAVLEY
Indhran PILLAY	Sebastian ANSTISS	Kieran MOORE	Sarah DUNNAGE
Jason NISSEN	Frans KRAUSE	Dharmesh JAYASWAL	Lal JAYAKODY
Hirenkumar KARMATA	Wai Loon CHAN	Tao LI	Chien-Chih CHEN
Charles CROZIER	Piers JAMES	Hoa NGUYEN	Fernando DELA CRUZ
Andrew HERON	Marcos FAVRIN	John WYLIE	Wei SHI
Abdoljalal KOUCHAK	Teklia OKBASLASIE	Neil CHAPMAN	Roman THOMAS
James O'NEILL	Giulian FAVA	Abraham SARGUNASINGH	Liam IRVINE
Aidan HOGAN	Daniel BANALES	Adam TURNER	Zancong LI
Paul PETERS	Chad MARTIN	Thomas BASKERVILLE	Jared OTTO
Jorge HERRERA ROMAN	Martin LEICHT	Ahmed ELNASHAR	Peter MELAZZINI
Benjie BANSILOY	Tyson COONEY	Chathura SENARATH	Sameh KHELLA
Andrew FRANKLIN	Chze Siong WEE	Alexander BONG	James SOKOLICH
Steve YEUNG	Dushyant PATEL	Ahmed ELSAMAHY	Maijiu WEI
Assem ALJAFARI	Juma SAJJAD	Sajid SYED	Rohan RICHARDSON
Ahmad ALDARADKEH	Jaime CASTRO ORMENO	Ahmed ELSAYEH	Sheng LI
Sugar Rey ANASTA	Vijai GOPAL	Naresh RACHA	Richard HILL
Tai-Guen MOON	Sean FRAZER	Adhil Azeez	Ayman ALY

THANKS



Congratulations and best wishes to the following RPEQs who have retired:

Ralph EDEN

Jeffrey STEPHAN



CONNECT WITH BPEQ ON LINKEDIN



Don't forget BPEQ is on LinkedIn. To keep up to date with the latest news and events from BPEQ or to start a discussion on registration or engineering issues generally, click **FOLLOW**.

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