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A WORD FROM THE REGISTRAR

Thank you to all the RPEQs who renewed their registration prior to the 31 May deadline.

The renewal process was entirely online this year and BPEQ appreciates how the majority of RPEQs adapted to and embraced this change. So that we can improve the online renewal process for next year RPEQs have been emailed a survey. The survey will be open until 3 August 2018.

During the 2017/18 registration year BPEQ received record numbers of monthly registration applications and reached a total of 13,000 RPEQs earlier this year. BPEQ has gone to great lengths to meet with engineers right around Queensland and interstate through registration roadshows, seminars and conferences. This engagement with the profession is helping to clear up mistruths about registration, improve engineer's understanding of the Professional Engineers Act (PE Act) and RPEQ system, state the benefits to the profession and encourage more engineers to become registered. If you would like to arrange a seminar on the PE Act and RPEQ system for your workplace please get in touch.

Board members and BPEQ staff will visit Rockhampton next month for the regional meeting and a meet and

greet with local RPEQs. RPEQs are asked to RSVP to attend the meet and greet which is an excellent opportunity to get to know the Board and BPEQ staff, discuss the PE Act and network with peers. You can find out more about the meet and greet in this issue of the e-news.

Also in this month's e-news is a legal case note discussing two cases that resulted in reprimands for the persons involved; one involving a RPEQ and the other involving an unregistered person.

Finally, welcome and congratulations to Jacinta Ricketts on her appointment to the role of Principal Legal Officer.

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



THE CRITICAL ROLE OF RPEQS IN CONSTRUCTION DESIGN PROJECTS

Engineering gives foundation to the built environment that the world admires, so take the lead and deliver strength to the team, writes Yvonne Pengilly.

As the construction representative on the Board of Professional Engineers of Queensland (BPEQ), this article is with specific reference to engineers within the building and construction sectors, however many of the principles will apply to all facets of engineering.

The world admires building structures for their beauty, however, this beauty can only endure environmental conditions with the correct engineering and maintenance of the structure. Therefore, the built environment is dependent on engineering and the successful application of the engineering principles.

As a RPEQ – or as an unregistered engineer who is directly supervised by a RPEQ who is responsible for the professional engineering service¹ – your role within the project team is one of expert knowledge of engineering design and is the foundation which is required for a successful structure. As such, you need to lead by example, instilling knowledge and experience to support the team. The team includes not only your immediate design team, but also the design manager, other design consultants, the manufacturer, builder, civil contractor, subcontractors, certifier, client and end user.

A project's success is dependent on the team's success, supported by active and cohesive members – not individuals wandering aimlessly. We have all heard the saying 'the best team is not necessarily made up of star players.' Often, you as the RPEQ responsible for the service will not have selected the team, however you can always consider and align tasks to the strengths and weaknesses of each member and manage each accordingly. Additionally, you can ensure clear communication and documentation with the end goal always in focus, whilst ensuring all team members are actively participating and are not simply passengers.

The RPEQ responsible for the design project is the engineering team leader and they and/ or other RPEQs within the team must directly supervise all unregistered persons in the team who carry out professional engineering services



Yvonne Pengilly is BPEQ's building and construction industry representative. Yvonne has 30 years' experience as a consultant, contract administrator, project manager, builder and managing director working in north Queensland. She has studied at the Queensland University of Technology and is a member of Women in Construction, Queensland Master Builders Association and the Australian Institute of Company Directors. Yvonne has been awarded on a number of occasions by QMBA for her work and service in the building industry.

for that design project. I now challenge RPEQs and unregistered engineers in an engineering team to answer each question below on all projects and confirm that you can answer in the affirmative in all cases.

- Have you reviewed the requirements for RPEQ certification and engineering design as clearly set out in the Development Approval (DA), Operational Works Approval (OWA) and Building Approval (BA)? Have you discussed these requirements with the client, builder and civil contractor?
- Is a RPEQ supervising the design service and certifying the design?





Iconic buildings like Milan Cathedral can only endure environmental conditions with the correct engineering and maintenance.

- If you are not a RPEQ; are all the professional engineering services you and other unregistered persons carry out for the design project, carried out under the direct supervision of a RPEQ as required by section 115 of the PE Act?
- Who is the individual/s who carry responsibility for the design project for the company and are they a RPEQ registered in the relevant area/s of engineering? If the person is not a RPEQ in the relevant area/s, they cannot carry out professional engineering services nor supervise unregistered persons carrying out professional engineering services in those areas². Under the PE Act, only individuals (not firms or companies) can obtain registration as a RPEQ and accordingly only individuals (not firms or companies) will be held professionally responsible and subject to disciplinary action under the PE Act for the professional engineering services that they either; personally, carry out, supervise and/or approve/certify.
- Which individual/s in the team are responsible for the design under the PE Act? The simple answer is, the RPEQ/s supervising the carrying out of

- the design service and/or approving/certifying the design.
- If you are a RPEQ for the manufacturing, construction or engineering firm responsible for design, do you feel empowered to voice your opinion on the design? Have you directly supervised the design team through the entire process and have you checked all relevant areas of the design? Under the PE Act it is your responsibility to directly supervise the design (even for very experienced engineers in your team who are not RPEQs).
- Have you read and understood the instructions and disclaimer on the engineering software your team works with, and does your team have an equal understanding of these parameters?
- Is there a Scope of Works (SOW) and Contract for the Engineering Design Work? Is there a set of clear parameters of responsibility for each team member and are you as RPEQ and all members of your engineering team clear in the requirements of your scope? If the team member is not a RPEQ are they aware that they must be directly supervised by a RPEQ when carrying out professional engineering



services and that it is an offence under the PE Act to carry out professional engineering services if they are not directly supervised in doing so unless that service is carried out only in accordance with a prescriptive standard?

- Are you diligent in discussions with the project developer and client on the purpose and intent of the design and are there supporting records? Misunderstanding and lack of clarity leads to confusion and lessens the strength in the team and ultimately affects the project³.
- Have you been to site? If not do you have sufficient and clear information on the site and its surroundings to undertake the design? If not have you clearly identified this on the design documentation to ensure any person reading individual documents relative to the design are clearly informed of the parameters for the design?
- Have you followed up with clear wording on the design documentation such as 'Preliminary Design – NOT FOR CONSTRUCTION' or 'Final Design – FOR CONSTRUCTION'?
- Does the title block on the design read clearly and show revisions, dates and the RPEQ who has approved and takes responsibility for the design?
- Does your design documentation clearly identify the required minimum maintenance to maintain the structural integrity of the structure?
- Do you know the client and the builder? Have they changed since initial and preliminary design?
 Have you checked the registration of the builder on the relevant building authority's website, understand their capabilities, category and currency of registration?
- Is the building work being carried out by a professional team? Do you understand the capability of not only the builder or civil contractor but also the subcontractors and suppliers who will be undertaking the majority of the works under the head contractor's supervision? When you understand capabilities, you can ensure you underpin the areas of weakness with additional

- team strengthening, and control overconfidence where necessary.
- Do you have a clear understanding of what you should do if you believe a civil contractor or builder has undertaken substandard work?⁴
- Have you filed ALL the contracts, SOW, correspondence, design, inspection evidence, reports and final certification documentation where it can be securely stored and accessed if ever required? Have you recorded changes to the design, or as built structure and has a RPEQ assessed those changes? Do you have access to the electronic filing system within the company files as the company RPEQ?

As the RPEQ signing the design documentation and/ or directly supervising engineering work carried out by unregistered persons, you are responsible for the design - the public is reliant on your knowledge and expertise to ensure correct engineering and thereby ensure the quality and longevity of the constructed design and their safety. It is important that you understand that as the RPEQ, it is you who is responsible under the PE Act for the engineering design including all professional engineering services which informed that design which were carried out by unregistered engineer/s and other unregistered person/s in the team. It is not the engineering company, builder, civil contractor and/or trade contractor's responsibility.

The above is by no means an exhaustive list of questions, but rather a series of prompts to reinforce that the RPEQ needs to consider not only the design and engineering principles, but also elements of team engagement and leadership, clear documentation, secure filing and that everyone understands their own responsibilities as unregistered persons and the responsibilities of the RPEQ.

As a RPEQ or an unregistered engineer or other unregistered person working under the direct supervision of an RPEQ, I encourage you to remember the policy of 'If it's not right, it's not right'.

^{1.} See section 115(5) of the *Professional Engineer's Act 2002* which provides that a RPEQ directly supervises an unregistered person in carrying out a professional engineering service only if they direct the person in carrying out that service and oversee and evaluate the carrying out of that service by the person. For further guidance regarding what constitutes a 'professional engineering services' and direct supervision under the PE Act see the Resources tab on BPEQs website.

^{2.} Pursuant to section 115 of the PE Act it is an offence to carry out professional engineering services if you are not a RPEQ registered in the relevant area of engineering or if you are not directly supervised by a RPEQ registered in the relevant area of engineering unless the service is carried out *only* in accordance with a 'prescriptive standard' as defined in the PE Act For further information on offences see the resources tab on BPEQs website.

^{3.} The Queensland Building and Construction Commission (QBCC) states that clear, consistent communication between all parties prior to and during a build can help to improve the outcomes of any issues that could occur during a project.

^{4.} If an engineer identifies an issue during the build, they should bring it to the attention of the appropriate party (builder or certifier). Where possible, the engineer could also suggest or provide a solution to the problem as part of this process. Ideally, this approach would result in the rectification of any issues, allowing the build to continue. If the problem cannot be resolved through this approach, or if it becomes clear to the engineer that their concerns will not be addressed by the relevant responsible party, they should advise the home owner to lodge an application to the QBCC's Early Dispute Resolution (EDR) service. The EDR service is for disputes between QBCC principal contractors and home owners and applies to contracts for domestic building work in excess of \$3,300 where concerns regarding defective building work, non-completion and contractual issues arise prior to completion of the contract.



CASE NOTE: BPEQ REPRIMANDS RPEQ AND NON-RPEQ

When BPEQ believes that a RPEQ has engaged in unsatisfactory professional conduct, or suspects that a person has contravened the *Professional Engineers Act 2002*, it may investigate the matter.

Two recent investigations by BPEQ have resulted in reprimands; one for a RPEQ and the other for an unregistered person.

REPRIMAND OF RPEQ

The RPEQ was the engineering director for a local council. The council engaged external engineering consultants to design a seawall. The council then built the seawall over an extended period. Due to budgetary constraints, the finished seawall was smaller and less robust than the original design. It also had a somewhat different footprint. The RPEQ changed the design in consultation with the council, but failed to document the changes. The RPEQ did not, for example, keep notes or produce amended plans.

A residents' association complained to BPEQ about the RPEQ's conduct and an investigation was started.

BPEQ considered that documentation of design changes is standard industry practice. It is important for various purposes such as re-approval processes, construction certification and record-keeping for future reference. BPEQ found that the RPEQ's conduct fell below the standard that would reasonably be expected by the public and professional peers and so the RPEQ had engaged in 'unsatisfactory professional conduct'.

BPEQ concluded that a reprimand was the most appropriate sanction to encourage better practice by the RPEQ and help to protect the public. Under BPEQ policy, the details of the reprimand will appear on the RPEQ's register profile for seven years.

REPRIMAND OF NON-RPEQ

The second case involved a former RPEQ whose registration had been cancelled. Some years later a client of the person notified BPEQ that the non-RPEQ had signed design plans using the RPEQ title. A person who is not a RPEQ must not use that title (see section 114 of the PE Act).

BPEQ investigated the matter. It did not accept the person's argument that they thought they had regained registration.

A criminal prosecution was not an option, as more than two years had passed since the person had used the title. BPEQ decided to reprimand the person. A reprimand will not have any immediate practical effect but it would of course be relevant if the person applies for registration again in the future.

QCAT

A person who is reprimanded by BPEQ can apply to the Queensland Civil and Administrative Tribunal for a review of the BPEQ's decision. QCAT has the power to change the BPEQ's decision if it considers that a reprimand was not the 'correct and preferable' decision.

FURTHER INFORMATION

Information about BPEQ policies and processes is available on the BPEQ website or by contacting BPEQ directly at legal@bpeq.qld.gov.au or calling 07 3210 3100.

While BPEQ staff will endeavour to provide assistance about processes and procedures, staff will not provide legal advice.



CQ MEET AND GREET WITH BPEQ

Central Queensland RPEQs are invited to a meet and greet with BPEQ on 8 August 2018 from 5:00pm - 7:00pm.

This is a free event for RPEQs to meet with BPEQ members and staff and discuss the issues that matter to them. Canapes will be served on the night and alcoholic beverages will be available for purchase from the bar.

DATE 8 AUGUST 2018
TIME 5:00PM-7:00PM

VENUE QUALITY HOTEL REGENT

ROCKHAMPTON, MARQUIS ROOM, 192 BOLSOVER STREET ROCKHAMPTON CITY, QLD 4700

RSVP DATE 1 AUGUST 2018

For further information visit http://bit.ly/2uv7ZLK or contact BPEQ Executive Assistant Taunese Aplen at taunese.aplen@bpeq.qld.gov.au.

UPCOMING CPD COURSES

AICD COURSE

Safety governance: how informed is your board about managing damage?

Brisbane – 22 August http://bit.ly/2uTsLEf

IPWEAQ COURSES

Road Safety Audit Workshop Brisbane – 21-22 August

Road Safety Audit Refresher Workshop

Brisbane – 13 August

Erosion and Sediment Control Level 2, Intermediate Training

Townsville – 17 October

Erosion and Sediment Control Level 3, Advanced Training

Brisbane – 11-13 September

WOMEN IN CONSTRUCTION, INFRASTRUCTURE & ENGINEERING LEADERSHIP SUMMIT

Sydney – 20-23 November

http://liquidlearning.com/documents/ WICE1118A/WICE1118A_C8.pdf

TO INCLUDE AN UPCOMING CPD COURSE IN THE BPEQ E-NEWS CONTACT BPEQ'S COMMUNICATIONS AND MEDIA ADVISER.



WELCOME TO OUR NEWEST RPEQS

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

Davin SLADE Sahar MAHDAVI Claudia NOVATI Damian DRYDEN Mohioddin DASHTI Jarreau ALINUR **Bevan SULLIVAN** Saad KHAN John McCORMACK Paul SPENCE John GRAHAM Jiannan ZHAO Roberto INCAMPO Jared GIBBARDS Matthew WALLACE Amando TIO-ONG Stephen COOK Burcu NACAR Craig KELP Francis AYAN Angus STIRLING Ahmed MOHAMED Mohammadjavad HEMMAT Alexandra GREGORY Maylin CORROS BACCA Rajunder BHULLAR Michael RIESE Ren HONGLI Brian LORD Paul GOODGER Matthew CARRICK Chandrakumar KRISHNAPPA **Edmund KIENAST** Keyvan LASHKARISHAFIEI Alistair PAGAN Bernie-Anne FREEMAN **Ernest SHUM Vuk SOSKIC** George MALAN Roger BYRNES Kruno LESKRACIC Michal KRZEMINSKI Amelia BAUER Emma KING Aaron SILVESTER Furgan MALIK Anthony MILLS Michael EVERT Nabeel AHMAD Earl AGUIAR Barry ABRAHAM David Folan Mark SKINNER James BOND Luke CLARKSON David O'MALLEY Yinlin ZUO Kwok Choi CHAN Alice CONNELL Nicholas WEST lason FONG Solmaz REITOLLAHPUR Ahmed SELIM

Rumana KHAN Elliot HANNAN Mohammed EL KHOLY Renato HULIGANGA Muhammad MAJEED Aaron BIRKBECK-MCKAY Dipaka SEALETSA James WECH Michael PARKINSON Pillar ENG Joseph WALSH Terence VAN ZYL **Gregory WATSON** Chirag PATEL Renee PETERS Shane ELSON Ziad SASY Amelia MARSHALL Derek WRIGHT Mitchell HORN Kristijan KAKSA **Grant HAYDON** Minh TRAN Helen CLIFFE Mohammad ABDELRAHMAN Steven SENINI Mark GRAHAM Scott McEWING Nicholas MORPHETT Stuart KERR Jennifer ROSS Sean MURDOCH Jack LIN

Charles SWEENEY Damian LONG Mostafa BADRAN Megan GANNON Karl KOOPS Samuel LE NOBLE Graeme JOHNSTONE John MASON Jair AMARO Ricky TIBBITS **Bruce POWER** Ying LIU Dobrivoj BOJINOVIC Tommy WONG Jake DuBOIS James BOORMAN Yu XIE Thomas BARKER Dileeka JASINGE Brian CHAPULA Liam CRIMEAN Matthew KIDD Mohamed ALGAFAARY Andrew TAYLOR



Brodie DUNNE Randa HEMIDA Kate VUGTS Sumon BHAKTA

Ulises VELASQUEZ Ray KOURY

Vincent BUTLER
Bradley THOMPSON
Sembukuiti SILVA
Anita MUMFORD
Dominic GRENIER
Thomas KIAER-OLSEN

John WHITE

Naveed CHOHAN

John DICKSON

Dieter SEEGAL

Kyle STOJCEVSKI

William DALY

Duane FEWQUANDIE
Jared SCHWEITZER

Kevin HURST John PRICE Zita DORE

Timothy LAWRENCE
Timothy ROWLAND

Andrew DZIANO

Palaniappan MUTHURAMAN

Adam GERLACH Nathaniel PARKER

Victor ABBOTT

Sebastian TORRALBA

Carmen PO

Pulasthi KODIKARA Vaughan LEWIS Kendrick GEORGE

Farnam FATHALIAN

Sajjad QAMAR David NGIAI Woody BEAVEN Matthew BRIMS Dean UNDERWOOD Robert BARTUS

Daniel SIMMS Peter BLYTON Laura KEEN

Lachlan PRESCOTT Niklas GANSEL Thomas JAMIESON Andrew HARRIS Ubaldo TORRE Zhiqi PAN Ivan WONG

Bobogy VARUGHESE

Joshua FAIRHILL
Gavin SPANNER
Kevin COMBE
Nengfen ZENG
Florian HITTINGER
Jamin WOOD
Oi-Yan CHAN

Shahab RAD Vinh TRAN

Rebecca HARVEY

Srikanth VADAPALLI

Seyed ARABSHAHI Gang WANG Matthew WATERS Ryan MURPHY Catalin ILIESCU

Brett BIRCH Ahmed ADAWY

Mohammod HOSSAIN

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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