FREQUENTLY ASKED QUESTION PROFESSIONAL PRACTICE

ENDORSEMENT/SUPERVISION

*PE : Professional Engineer without Practising Certificate PEPC : Professional Engineer with Practising Certificate

1. What types of plans can a PE submit on behalf of his employer? Who bears the liability, the PE or his employer in such cases?

A PE cannot submit any plan to the Authorities except as provided for under S. 8A;

"A PE may submit plans or drawings to any person or authority in Malaysia where such plans or drawings are in relation to an equipment, a plant or a specialist product invented or sold by him or his employer."

The PE who submits such a plan or drawing will bear the liability, even if the plan or drawing is not prepared by him.

2. Can a PE endorse proprietary roof truss system for submission to the Local Authority?

A PE may endorse the proprietary roof truss system sold by him or his employer. However, only a PEPC can be the Submitting Person to the Local Authority.

3. Who will be responsible if the Proprietary Roof Truss system fails?

Only PEPC can be the Submitting Person and will be held liable for plans designed by him whether directly or indirectly, including proprietary roof trusses 'designed' by others which are deemed to have been checked and approved by him.

4. Issue on liability; how to take action against foreign engineers?

Following the amendment to REA 2015, there is no distinction between local and foreign engineers.

5. Is a PE allowed to submit plans for charity building as a pro bono service?

Only a PEPC is allowed to be the Submitting Person. A PE is NOT ALLOWED to submit plans even as a pro bono service.

6. What is a submitting person and what is a submitting consulting firm?

Certain local authorities accept plans from submitting person who do not practise under a consulting company registered with BEM.

Submitting Person (SP) is a PEPC who submits plans to the Authority. Under BEM's definition, there is no such term called submitting consulting firm but rather Engineering Consultancy Practice or ECP. Submissions to the Authority must be by a PEPC practising under a registered ECP.

7. In road projects, the relocation of existing services such as 33kV, 132kV, telecom cables, water mains and sewerage pipes, are prepared by civil engineers and submitted by them as they involve civil works i.e. trenching, reinstatement of works etc. Is this acceptable? So far these have been accepted and approved by the Utility Authority.

Yes, civil engineers may do so, since such works constitute part of the infrastructure works for a building project.

8. Is supervision from a consultant engineer who carries out the design a must? For example, the client appoints a consultant engineer just for design but not for supervision, as supervision is by the client's team.

Under UBBL Bylaw 5, supervision must be by the Submitting Person. Even if carried out by the client's team, the SP shall remain responsible and liable. Therefore he must have full control over the supervision team.

9. What do you mean by supervision?

Supervision is to ensure that construction is in accordance with the approved plans and in compliance with the UBBL, Sarawak Building Ordinance and other relevant laws. Under UBBL Bylaw 5, the Submitting Person shall be responsible for the supervision of the project. He can be represented by his representatives under his supervision to carry out supervision at site.

- 10. Can I certify completion of construction if I do not supervise the construction works of the project despite it being designed by me?
 - NO. As the Submitting Person, you are required to provide supervision of the construction. Therefore, you should ensure you provide the supervision before you certify completion of the construction.
- 11. I was appointed in 1997. Subsequently, the project was abandoned. Recently it was revived without my knowledge. The job is now completed and the architect asked me to re-submit and I refused. Am I acting correctly?

You are right not to sign anything you did not supervise. You may lodge a complaint with BEM if another engineer takes over to sign the submission without your letter of release.

12. Is Subsurface Investigation or Site Investigation (S.I.) required for each project to be developed?

YES. You should specify appropriate S.I. to obtain the relevant subsurface information (e.g. soil and rock characteristics and parameters, groundwater information, etc.) so that the foundation design can be properly carried out to ensure public safety.

13. Do I need to supervise the Subsurface Investigation (S.I.)?

YES. All S.I. should be supervised by the professional who is responsible for the design or by qualified and experienced staff under his control. (BEM Circular No. 006 "Engineers' Responsibility for Subsurface Investigation")

- 14. Can I just leave the scope of works of the Subsurface Investigation (S.I.) (e.g. locations, numbers, types of field and laboratory tests, etc.) to be specified, to the S.I. contractor?
 - NO. You should properly specify and determine the numbers and suitable types of field and laboratory tests required for the site for your design later. (BEM Circular No. 006 "Engineers' Responsibility for Subsurface Investigation")
- 15. Where do engineers stand when the 'supervision' part of a project is taken off from the scope of work by the JKR? In contracts with JKR it is stated clearly that the services of the Engineer are required only up to the design stage. The question is 'will the engineers still be legally responsible for the work?'

The BEM Circular is very clear on the matter; if 'supervision' is not included in the Scope of Works; do not sign the Certificate of Completion and Compliance or equivalent, especially for projects in the private sectors!

However, for public sector projects, the issue of the Interpretation Act which stipulates that any law of parliament is not binding on the government unless specifically stated otherwise, will need to be addressed.

Meanwhile, the Board of Engineers has advised the Director General of the JKR to include supervision by the consulting engineer when engaged to carry out design works.

16. Is the PEPC engaged by a Contractor to design and endorse an alternative design, to replace the original design by the Submitting Person (e.g. Consultant engaged by the Developer), required to supervise and be held liable for the alternative design works?

YES. The PEPC of the Alternative Design shall be responsible for the design including supervision of the works.

17. Is the PEPC engaged by a Contractor to design and endorse Temporary Works, required to supervise and be held liable for the Temporary Works?

YES. The PEPC who design and endorse the Temporary Works shall be responsible for the supervision of the Works.

18. As the Submitting Person for a project, what should I do when I receive the Contractor's submission of Temporary Works design?

As Submitting Person for the project, you are liable for the design of the Permanent Works while the Contractor is responsible for the Temporary Works. Your action as the Submitting Person would be:

- For Temporary Works that may affect the safety of the workers and public (refer to BEM Guidelines on Temporary Works), ensure that the Contractor engage a PEPC to design, endorse and supervise the Temporary Works.
- 2) Verify with the PEPC engaged by the Contractor to ensure the PEPC is personally involved in the design, endorsement and supervision of the Temporary Works. (This is to prevent fake documentation or misuse of standard documents).
- 19. Is PEPC who is the Submitting Person of project responsible for the quality and workmanship of the Contractor's work?

No, the PEPC of a project is not responsible for the quality and workmanship of the Contractor's work which is solely the responsibility of the Contractor. Contractor's quality and workmanship include materials supplied, installed or placed or cast at site, and the way and methods these works are carried out (e.g piling, concreting, piling, steel reinforcement placing and securing, temporary works, etc).

LETTER OF RELEASE

1. An Engineer who is responsible for submission of drawings to the local authority resigns or retires half way through a project. Another engineer within the same Engineering Consultancy Practice (ECP) takes over. How does the Board view this issue in the context of engineer taking over the works of another?

If it can be established that the 2nd Engineer is from the same Engineering Consultancy Practice as the 1st Engineer, then the issue of supplanting does not arise.

2. If the project has changed hands i.e. previous owner has sold to another company, does circular No. 1/2006 still apply?

The Letter of Release is still applicable where the new project has linkage to the previous project, whether in terms of ownership or development details. If in doubt, it is advisable to refer to the Board for clarification.

3. What is the meaning of "intervene or attempt to intervene" under Clause 1. (b) of Circular 1/2006?

What if the client is seeking a second opinion especially where there is a cost implication and the client is looking for a more economical design solution?

"Intervene" in this instance would include offering opinion, advice, etc. unsolicited to the client when there is already a registered engineer on board. If the client wishes to seek a second opinion, then the 2nd Engineer, who is approached by the client shall follow the guidelines listed under BEM Circular 1/2003 "Guidelines for Checking/Reviewing The Work of Another Engineer" and BEM Circular 5/2005 "General Advice On Giving Of Second Opinion".

4. In a design & build contract, the 1st Engineer is engaged by contractor to design & supervise. However, after the contract is awarded to the contractor, the contractor decides to engage a 2nd Engineer to carry out supervisory work, with no change made to the design works by the 1st Engineer.

Does the 2nd Engineer need a LOR for supervision work?

BEM's Circular on Supervision of Construction of Projects clearly stipulates that the Submitting Engineer must design and supervise the project to completion.

If the 1st Engineer did not supervise the construction then he should not sign the CCC or equivalent.

If the 2nd Engineer wishes to take up the supervision work then he must obtain a LOR from the 1st Engineer and also take over as the Submitting Person regardless of whether the original design is changed or not.

5. In the event that the PEPC voluntary discharges / releases himself during the project (ie. not completed) and there is no 2nd Engineer to take over, will the Local Authority accept it as there will be no engineer responsible for the project?

A PEPC cannot simply relinquish his services unilaterally without the consent of the Local Authority. The PEPC must notify the Local Authority first. If there is no Qualified Person (Submitting Person) supervising construction, site work cannot proceed.

Note that improper termination of duties by the PEPC will affect public interest, and also subject him to legal recourse by the client on losses suffered amongst others.

6. Is the 2nd engineer liable for the design and works supervised by the 1st Engineer?

The "last man standing" rule applies. Whoever is the Submitting Person signing off the completion of works, will assume full liability even if some of the works had been carried out earlier before his involvement.

7. A project or piece of property changes ownership and the new owner appoints his consulting engineer. If the previous owner has not settled the fees to his engineer (1st Engineer) and no physical work has commenced on site, has the newly appointed engineer (2nd Engineer) erred in accepting the appointment as he may not be aware of the previous appointment by the previous owner.

It is the duty of the 2nd Engineer to verify that there is no previous 1st Engineer on board. In the event that the 2nd Engineer was initially not aware of a previous appointment by the previous owner, but subsequently finds out that there was, then it is his duty to immediately inform his client and seek a LOR from the 1st Engineer.

Note that a Letter of Release is applicable where the new project has linkage to the previous project, whether in terms of ownership or development details. If in doubt, it is advisable to refer to the Board for clarification.

8. When a project is partially completed and the owner terminates the 1st Engineer's services and appoints a 2nd Engineer to take over, will the 2nd Engineer be liable for the portion of works already partially completed under the 1st Engineer?

The "last man standing" rule applies. Whoever is the Submitting Person signing off the completion works will assume full liability even if some of the works had been carried out earlier before his involvement.

9. How does an Engineer respond when the Client's draft Memorandum of Agreement with the Engineer contains a clause which stipulates that the Engineer shall give a presigned Letter of Release or to forward a Letter of Release immediately upon receiving a termination letter from the Client?

The Engineer should inform the Client that the Law overrides all contractual provisions and he must follow the Board of Engineers, Malaysia Circular on 'Taking Over Another Engineer' procedures. Otherwise, he will be contravening the Law. He should then insist for such a clause to be deleted from his Agreement.

CERTIFICATE OF COMPLETION AND COMPLIANCE (CCC)

1. What is Certificate of Completion and Compliance (CCC)?

It replaces the Certificate of Fitness for Occupation (CFO) issued by Local Authorities for projects approved prior to April 2007. Due to government policy to encourage self-regulation by professionals, the Street, Drainage and Building Act (Amendment) 2007 (Act A1286) was amended to stipulate that a Principal Submitting Person must sign a certificate called Certificate of Completion and Compliance(CCC) for him to confirm that the project for which he had obtained Building Plans approval from a Local Authority, is completed and has met all statutory requirements with regards to health and safety aspects and is ready to be occupied with all essential utilities services connected. The Principal Submitting Person can only be either a Professional Architect or a Professional Engineer with Practising Certificate (PEPC) depending on the type of building involved. CCC is issued to the Owner and its two (2) duplicate copies must be submitted to BEM (if the PSP is a PEPC and to BAM if the PSP is a Professional Architect) and the Local Authority within 14 days of issue together with all 21 supporting G forms signed by the relevant Submitting Person of the respective Professions or Engineering Disciplines.

2. How should the PSP respond when a certain LA verbally instructs him not to issue Form F until they have conducted a site inspection, even though Forms G1 – G21 were all duly signed by all parties to enable him to issue Form F?

So long as all documents are in order, the PSP can issue the CCC. LAs cannot impose any additional conditions. As far as the LAs are concerned, they still retain their rights under the UBBL e.g. for site inspection during construction. LAs can report to the respective Boards on any conduct violation by the respective Submitting Persons. The objective of CCC on self-regulation must be maintained.

3. Original set of plans is submitted by Submitting Person (SP), Engineer A, but somehow the developer managed to obtain CCC signed by another SP, Engineer B. If the building then collapses, who should be responsible?

The Submitting Person (SP) signing the respective Form Gs in support of CCC is liable. The second engineer (Engineer B) who takes over as the SP is also be deemed to have taken over the all responsibilities and liability.

4. Contractor submits a counter proposal which is signed by his (contractor's) own Professional Engineer. However, upon completion, the original SP endorsed the G forms and CCC, who should be responsible?

The SP who signs the G form is responsible.

5. Each LA/One Stop Centre (OSC) has its own procedures for CCC submission. If all the OSCs are very familiar with the submission there would be no problem.

Please take note that CCC is different from OSC. For CCC, there are Local Authorities (LAs) who are doing very well as they understand the CCC process. However, it is acknowledged that there will always be new staff and problems do arise. Please inform BEM/BAM of any discrepancies for BEM/BAM to refer to Kementerian Perumahan dan Kerajaan Tempatan (KPKT) to resolve the problem.

Please note that BEM/BAM were not involved in the development of the OSC. This is under the jurisdiction of KPKT who has to deal with each State in charge of their respective LAs.

6. For a building or structure built for temporary use, then demolished or renovated for other use, is the procedure of CCC repeated for renovation?

Temporary structures only need a permit from the local authority. There is no need to issue a CCC. For internal changes not affecting type of use, there is no need for CCC.

7. Is CCC required for renovation works?

Where building plan submission is required (e.g. change of building façade), then CCC is required. For replacement with new lift including lift car without changes to the building (e.g. no additional floors) then no CCC is needed.

8. For Form Fs signed by Architects, are their corresponding Form G's submitted to BEM?

Where the architect is the PSP, all Form Fs and Gs are submitted to the Board of Architects (BAM) including those Form Gs signed by PEPC. BEM works closely with BAM to conduct checks on the Form Gs submitted to BAM.

9. Can the PEPC employed by ECP, submit / sign the G forms?

Yes.

10. Under CCC, who should sign for marine / fishery projects?

"Marine structures & facilities" falls under the scope of Engineer to issue CCC. Refer to www.bem.org.my Appendices A, B and C, jointly issued by BAM and BEM.

11. Form Gs – with reference to Approved Plan (Infra Works)-construction done but with variation from Approved Plan. Do we need to submit as-built plan to reflect the change. What is the best way to solve this?

Submit as-built plan to the local authority before or when issuing CCC.

12. Contractor has split-up; who then can sign form Gs on behalf of the contractor for CCC certification?

The moment a particular work is completed, arrange for its Form G to be signed (& keep it). Do not wait until all works are completed. However, in unforeseen situations, e.g. demise of the contractor, then furnish proof and BEM will advise on a case by case basis.

13. As stipulated in the UBBL, the submitting person who submits the drawings shall certify the completion of work. May I know why is it that in the case of lift, Form G11, the PEPC must certify the completion of lift work for which the PEPC did not submit the (manufacturer's) design?

Under Form G11, the PE must certify as the SP. Note that the PEPC, as the consultant; designs, specifies and integrates the lift services with all other systems within the building. The Lift company's Competent engineer/person shall sign Form G11 as the trade contractor and is NOT PERMITTED to sign as the SP.

14. For Form G18 on Street Lighting, are roadside lighting which are situated within the compound of a building owner, required to be submitted to the Local Authority for approval as 'Street Lighting' even though they are not handed over to the LA?

Roadside lighting is defined as Street Lighting where the installations are to be subsequently handed over to the LA for maintenance. As such these Street Lighting plans are required to be submitted for approval by the LA. An example would be roadside lighting within a residential housing development scheme.

However, roadside lighting which are installed within a property boundary, and which are not surrendered to the LA and are maintained by the property owners, are defined as Compound Lighting. Such Compound Lighting need not be submitted to the LA for approval and Form G18 shall be signed off as "Not Applicable" by the PSP for the issuance of CCC. Examples would be roadside lighting installed within the property boundary of an institutional, standalone residential, commercial or industrial development. Such lighting installations are deemed to be certified under Form G7 on Internal Electrical.

In exceptional cases when the road and drainage works within a property boundary are to be handed over to the LA but not the roadside lighting (e.g. for petrol stations) then approval by the LA is required and Form G18 endorsement of such roadside lighting is applicable.

15. Does the 'deemed approved rule' still apply for Local Authority or JKR/LLM for failing to reply after the Submitting Person has made the official request for the Letter of Support for a Form G, for the issuance of Form F (CCC)?

Yes, it is deemed approved if no reply is received by the Submitting Person after 14 days from the date of submission letter of the official request for the Letter of Support. The Letter of Support is then no longer necessary to be attached with the relevant Form G for the issuance of CCC. For this case, please attach a copy of your letter to LA or JKR/LLM together with the respective Form G.

16. Taking over another engineer's works: Will the new engineer be responsible for the whole of the works even though the works are already ongoing?

As far as the law is concerned, the consultant as the SP is liable for the entire project and not any portion thereof. If the consultant disagrees or does not accept liability for works already done, then he should not take up the works.

17. After a project has been issued a CCC or CFO as previously, is the LA responsible for its maintenance i.e. for roads, drains, slopes, culverts etc. Can they come back after 10 years and pin the failure on the consultants and blame it on the consultant saying that the "consultants are responsible for life"?

The consultant remains liable for his design (currently for life). If failure occurs, liability will be determined by the due process of law.

18. Certain LA requires PEPC to submit to them, Form F and only upon approval by them, the CCC can be issued. How do we overcome this?

CCC can only be issued by the PSP (when all requirements are met) and there is no need for prior submission of Form F to LA for clearance.

19. LA sometimes imposes new conditions to the developer before CCC can be issued such as to resurface neighboring roads. Otherwise, the PEPC will be fined.

The CCC scheme is premised upon the PSP fully complying with the Building Plan (BP) approval. As such any additional requirements imposed by the LA after issuance of the BP should be separately sorted out (mutually) between the owner and the LA. Should a PEPC encounter such unresolved issues, please forward the details to BEM to take it up with KPKT for resolution.

20. Should the PSP be responsible to check that all Submitting Persons in his project are bona fide and qualified to sign the relevant Form Gs?

Yes, it is the responsibility of the PSP to ensure the CCC (Form F or F1) issued is legally valid and cannot be challenged in the Court of Law. Should any of the SPs certifying the various Form Gs be found to be fraudulent or his professional practice was under suspension or deregistered at the material time of issuance, then the Form G certified by such a person is deemed invalid. This may then render the PSP's certification of Form F or F1, which is based on the validity of the supporting Form Gs, to be invalid.

21. Can a Developer insist that the Submitting Person (SP) pre-sign a particular Form G (any of the Form G1 to 21) for the Developer's safe-keeping prior to actual completion and certification of the works?

No, each Form G shall only be signed upon completion and certification of the works by the Submitting Person (SP). Pre-signing a Form G when the work is NOT YET COMPLETED is unethical and violates the code of professional conduct.

22. What are the mechanical ventilation systems covered under Form G10?

Form G10 is applicable only for mechanical ventilation of basement car parks to comply with a minimum of 6 air changes per hour ventilation rate. If there is no basement car park requiring mechanical ventilation, the PSP should then sign the Form G10 as 'Not Applicable'.

23. For a project with septic tank on a single factory lot where there is no external sewerage mains connecting to a central sewerage plant, is it still necessary to sign on G15 Form (Sewerage Treatment Plan)?

No. Form G15 is meant for central sewerage treatment plant serving several users. Septic tank in this case is treated as part of the sewerage reticulation and SP has to sign on G14 (sewerage reticulation) only