How Does the Geologists Act 2008 Affect Engineers?

by ***Suvarna Ooi***

THE Geologists Act 2008, published in the Gazette on 27 August 2008, was enacted to provide for the registration of geologists, the regulation of geological practice and for related matters. It also provides for the establishment of a 'Board of Geologists' and outlines its membership, functions and powers.

According to the Act, no person other than a registered professional geologist, a registered foreign geologist or a registered practitioner as defined in the Act shall be entitled to prepare and submit to any person or authority in Malaysia, geological reports or studies relating to geological services in any of the fields of geology specified in the schedule.

There have been many objections, especially among the engineering fraternity, about the controversial Act. *JURUTERA* met up with Ir. Dr Abdul Majid bin Dato' Abu Kassim, in his capacity as the Chairman of the Working Group on Geologist Act, Board of Engineers, to get his views on how the Geologists Act 2008 will affect engineers. Ir. Dr Abdul Majid was also the President of the Association of Consulting Engineers, Malaysia (ACEM).

He began by explaining that the Act mainly came about probably due to the numerous slope failures that occurred in the past. He said, "The public's first impression when slope failures occur, such as the landslide that took place at the PLUS Highway just after the Damansara toll plaza about three to four years ago, is that the engineers are not doing their jobs properly. As a result, some parties took advantage of the situation to claim the need for professional geologists."

THE ACT'S FORMATION

Unlike engineers who are under the purview of the Ministry of Works, geologists are under the purview of the Ministry of Natural Resources and the Environment. Prior to the proposal of the Act, the latter sought the views of other stakeholders. This led to the formation of a working committee by the Board of Engineers Malaysia (BEM) which comprised members of ACEM and The Institution of Engineers, Malaysia (IEM) to study the proposed Geologist Act.

After much deliberation, the working committee concluded that there was no particular requirement for a Geologist Act. In their feedback, they found that certain clauses were slightly ambiguous as they overlapped with the engineer's roles. Ir. Dr Abdul Majid stated that, "The Ministry of Works has always supported ACEM and IEM's stand in objecting to the Geologist Act. However, despite the objections, the bill was debated in Parliament on 26 June 2008 and the Act was subsequently passed on 27 August of the same year."

He added, "In the past, we made a suggestion that geologists should come under the purview of BEM as civil engineering and many of the fields of geology overlap. An engineer can register as an engineering geologist and practise both engineering and geology. However, many geologists disagreed with this suggestion and wanted their profession to be recognised separately."

According to him, one of the objections of BEM was on a particular clause in the Geologist Act 2008 which defined geological services as the provision of geological advice and services pertaining to all or any of the following including feasibility studies, planning *etc*. This is a major concern as, according to the definition, some of these geological advice and services may overlap with engineering services. He said, "The other important issue about the Act is the list of fields of geology which also includes engineering geology. This clearly overlaps with engineering work."

Another objection from ACEM and IEM was that the number of geologists was too small which numbered only in the hundreds. Questioning the need for the Geologist Act 2008, Ir. Dr Abdul Majid said, "Many people forget that a law is always enacted not to protect the profession, but to protect the public. In the case of geologists, what is the aim for such a minute profession that they must have an Act? If I were a geologist, I would be proud if there is no Act at all as that means I am self regulating and obey the rules."

He added that an Act is only needed to control and punish those who break the rules and to ensure that those who are registered are doing their work properly. He said, "For me, you are a better profession if there is no Act governing it at all. In the United Kingdom and Australia, there is no Engineers Act at all because the profession is able to regulate itself."

In response to the concerns raised by ACEM and IEM, the Board of Geologists included certain clauses in the Act which states that '*nothing in this Act shall be construed to mean that geological services are necessary for the practise of engineering for any purpose unless specifically requested by a professional engineer*'. This simply means that there is no requirement for any party to engage a professional geologist unless a professional engineer makes a request for one.[1]

Thus it is very important for engineers to keep in mind that they should only employ a geologist or advise their clients to do so when the need arises. Ir. Dr Abdul Majid said, "Engineers must be responsible enough to recognise when a geologist is needed in a project. My advice to engineers is they must know their subject matter and recognise their own limitation. When necessary expertise such as geology or other expertise is required, engineers should advise their

[1]*Bulletin Editor's note: It was later brought to my attention that Jabatan Mineral dan Geosains (JMG or Minerals and Geoscience Department) requires submission of terrain mapping for land classification in hill-slope development projects, thus possibly rendering this clause ineffective, or contravening it.*

Ir. Dr Abdul Majid bin Dato' Abu Kassim

clients to appoint these experts. The ethics and competency of engineers is very important."

TRANSLATING THE ACT INTO ACTION

Despite the enactment of the Geologist Act 2008, the fact remains that, under the Uniform Building By-Laws (UBBL), only architects and engineers are qualified to submit technical drawings and calculations to the local authorities. As such, public safety is still the responsibility of the architect or the engineer as geologists are not qualified to certify a building and can only act as advisers to architects or engineers.

Ir. Dr Abdul Majid said, "Once registered under the Act, professional geologists are certified to verify or sign certain reports. Currently, most geologists prepare reports such as feasibility studies. In Selangor, the local authorities require a geologist to submit a geological report if a project involves hill slope development." He added, "This is a major issue because this would mean that there is more red tape and this is not good for the industry. Instead, we should be cutting down on red tape."

Making a comparison to the situation in Singapore, Ir. Dr Abdul Majid said, "Their Building Laws are very clear. The only people who submit are the architects and engineers, and they specify when geotechnical engineers are required for certain projects. The geotechnical engineers will, in turn, hire a geologist when it is necessary." He added, "Despite having tightly regulated Building Codes, Singapore has no particular requirement for geologists. Only Malaysia has this special requirement. In fact, I believe very few countries in the world have this special requirement as well."

One of his biggest concerns is the fact that certain parties have interpreted certain clauses in the Geologist Act 2008 to mean that every project requires the services of a geologist. Ir. Dr Abdul Majid said, "This situation is true particularly in planning submission. To obtain the development order or planning approval, there is a whole list of requirements issued by Ministry of Housing and Local Government (KPKT). Among others, this list states that geologists are required to submit drawings on earthworks and slopes. It is obvious that this infringes on the engineer's work and responsibility."

He added that engineers have always not supported this planning requirement as earthworks and slopes are the responsibilities of the engineers. The expertise of a geologist is only needed if a project is involved in development on a rock slope. As such, it is not accurate to say that every project needs a geologist. In addition, when the ministry makes it compulsory for a geologist to be employed by the client during planning, this will increase the cost of a project unnecessarily which will, in turn, indirectly affect the public as the additional cost is passed on to them.

According to Ir. Dr Abdul Majid, one issue that many are not aware of is the stringent penalties that apply if someone is found to contravene the Geologist Act 2008. He pointed out, "One particular clause states that, if a person is suspected of practising as a geologist without registering with the Board of Geologists, the latter can issue a warrant to search the person's premises or any premises thought to be contravening the Act. Basically, this means that they can act as a law enforcement agency." Interestingly, both the Board of Engineers and the Board of Architects do not have the same sort of authority.

To avoid from contravening the Act, Ir. Dr Abdul Majid advised engineers who practise geotechnical engineering to remain within their area of work. He said, "Since they are not geologists, they should not identify themselves as geologists, instead they should identify themselves as geotechnical engineers, which is an accepted profession in engineering. In fact, many geotechnical engineers even employ a geologist to assist them in their work."

REGAINING THE PUBLIC'S TRUST

With each building that suffers from structural failure and slope collapse, the public's trust for the architects and engineers who design it becomes more eroded. This was clearly reflected in an article which appeared in a major daily on 4 June 2009 entitled 'The Collapse of Professionalism'. Ir. Dr Abdul Majid said, "That sort of headlines is damaging the reputation of all the professionals involved in the building industry. We must regain the public's trust by first improving our competency."

Recognising the need to raise the standards of local engineers, BEM is currently looking at introducing the Professional Competency Examination, a second tier examination to improve the capability and capacity, and technical competence of the engineers. This examination is currently practised in every major developed country in the world such as Singapore, the United States, Australia and New Zealand. The aim of this examination is to improve the engineering profession to a level where failures are not immediately blamed on the engineers.

Ir. Dr Abdul Majid said, "We should also look at how other countries improve the competency of their engineers. In Singapore, for example, immediately after the Nicoll Highway collapsed, the government took immediate action to improve the competency of the engineers by amending the Professional Engineers Act and tightening its regulations to regain public confidence. Here in Malaysia, the Engineers Act has not undergone any major revision since 1967."

A strong advocate of change, he believes that the engineering fraternity should strengthen their position and work towards improving their own Act. He said, "Engineers should look after their own profession first. If they fail to do so, then other people will start taking bits of it away. For example, the building surveyors now want to establish their own Act, which IEM and ACEM has been opposing, because they believe the engineers have failed in their duty. So rather than focusing on other Acts, let us improve ourselves first, our competency and our technical capability." ■