



**VIA EMAIL**  
Our Ref: 147862

August 16, 2011

Sent to Various School Districts

**Re: Technical Guidelines for Seismic Upgrading of Schools**

In June 2008, the Ministry of Education updated School Districts on the work of the Association of Professional Engineers and Geoscientists of BC (APEGBC) and the University of BC Civil Engineering Department, to assist the Ministry with the implementation of a seismic mitigation program for BC schools. APEGBC was assisting the Ministry and Boards of Education through the development of seismic assessment tools and Bridging Guidelines for the Performance-based Seismic Retrofit of BC School Buildings (Bridging Guidelines).

As a result of further research, the Bridging Guidelines have evolved through expansion and refinement into the Seismic Retrofit Guidelines, 1st Edition. In May 2011, APEGBC Council approved the “Seismic Retrofit Guidelines, 1st Edition for the Performance-Based Retrofit of British Columbia School Buildings” as the best practice for the seismic assessment and upgrading of existing school buildings in BC. These guidelines provide engineers with expedient tools and ensure consistent analysis of the various types of school structures. APEGBC has distributed the attached bulletin regarding the development of the Seismic Retrofit Guidelines, 1st Edition to its members. APEGBC will also provide additional training sessions to qualified local engineering practitioners on use of the latest guidelines on September 30, 2011.

The provincial government accepted the liability for the use of the Bridging Guidelines as the best practice available and directed that they be applied in the seismic upgrade of schools. School Districts are now to use the Seismic Retrofit Guidelines, 1st Edition as they supersede the Bridging Guidelines.

To ensure engineers completing seismic projects are applying the latest design strategies, APEGBC has established a Technical Review Board comprised of experienced structural and geotechnical engineers to review preliminary plans for seismic upgrade projects. School districts are to ensure that the consultants working on seismic projects present their proposed approach to the Technical Review Board early in the project identification or project definition phase. Districts’ structural engineers should contact Peter Mitchell at APEGBC (604 412-4853) to make the arrangements.

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School Districts should contact their Planning Officer if they require additional information.

Yours sincerely,

*Original signed by:*

Doug Stewart, Director  
Capital Management Branch

Attachment

## **Technical Guidelines on Seismic Retrofitting of Schools Endorsed**

APEGBC has endorsed technical guidelines for the seismic retrofitting of schools in BC, the *Technical Guidelines, 1st Edition, for the Performance Based Seismic Assessment and Retrofit of BC Low Rise School Buildings (Seismic Retrofit Guidelines, 1st Edition)*. The guidelines utilize a performance-based methodology for the seismic assessment and retrofit of BC school buildings.

In partnership with UBC, APEGBC has been assisting the Ministry of Education to implement the Seismic Mitigation Program since 2004. Under the direction of the APEGBC Seismic Peer Review Committee, risk assessment and mitigation strategies for the seismic upgrading of schools in BC were developed, and the interim *Bridging Guidelines for the Performance-based Seismic Retrofit of BC Schools* were created in 2006 to provide consistent and rational retrofit methodologies for APEGBC members undertaking work on seismic assessment and retrofit of BC schools.

The *Seismic Retrofit Guidelines, 1st Edition*, replace the interim 2006 *Bridging Guidelines*. The *Seismic Retrofit Guidelines, 1st Edition*, apply the same performance-based methodology used in the 2006 *Bridging Guidelines*, and include enhanced information on seismicity by community, common school construction types, prioritizing structural elements that are at greatest risk, as well as a complementary web based tool which will allow practitioners to instantly generate seismic resistance criteria for specific types of construction.

For more information on the *Seismic Retrofit Guidelines, 1st Edition*, please contact Peter Mitchell, Director, Professional Practice, Standards and Development at [pmitchell@apeg.bc.ca](mailto:pmitchell@apeg.bc.ca) or (604) 412-4853.