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4.21 Avalanche

June 13, 2008

WorkSafeBC – Workers' Compensation Board of BC
Prevention Policy and Regulation Review Department
Policy and Research Division
PO Box 5350, Station Terminal
Vancouver BC V6B 5L5

Attention: George Matheson, P.Eng.

**Re: Comments from the APEGBC/ABCFP Joint Practice Board (JPB) on Draft Occupational Health and Safety Regulations
Part 4 General Conditions, 4.1 Definitions and 4.1.2, Snow Avalanche Assessments**

Thank you for the opportunity to provide input on these proposed amendments to the Occupational Health and Safety Regulations issued for public hearing in April, 2008.

Attached is the response of the JPB to the proposed amendments contained in Part 4, Definitions, Section 4.1 and Part 4, General Conditions, Section 4.1.2, Snow Avalanche Assessments. Tracked changes are used in the attached document to note the revisions recommended by the JPB.

Following is a brief rationale for each of the revisions noted in the attached document.

I. Part 1, Definitions

APEGBC issues non-resident licences to qualified individuals to practice professional engineering and/or professional geoscience in BC when those individuals are not residents of Canada. Such licensed practitioners are identified as licensees under the *Engineers and Geoscientists Act*. In addition, APEGBC also issues Limited Licenses to those who are not a professional engineer or a professional geoscientist but are granted right to practice authority, as a licensee under the *Engineers and Geoscientists Act* in a narrow field of practice. Thus the word licensee must be added to the clause contained in Section 4.1(a). Similarly, the ABCFP also issues special permits to individuals to practice professional forestry. Thus the clause "or holder of a special permit" must be added to clause 4.1(b).

II. Part 4, General Conditions, 4.1.2, Snow Avalanche Assessments

1. "Active Avalanche Safety Program"

Replace the word "control" with "reduce" and the work "eliminate" with "mitigate".

By definition, avalanche risk can be reduced but not controlled. In addition, avalanche risk can be mitigated but not completely eliminated.

2. "Avalanche Risk Assessment"

Adding the words "involving the application of engineering and geoscience principles" is fundamental. By their very nature, avalanche risk assessments include the fundamental application of engineering and geoscience principles. APEGBC notes that the addition of this phrase is consistent with the intent reflected in the Technical Bulletin issued by the

APEGBC/ABCFP JPB entitled "Snow Avalanche Assessments in the Forest Sector, Skill Sets of QRP's". APEGBC and ABCFP continue to support the above referenced Technical Bulletin in terms of characterizing the role of ABCFP members in applying such principles when carrying out snow avalanche assessments.

Recognition of the application of the above referenced principles in these regulations is required from a public safety perspective to ensure that those not aware of the fundamental principles involved do not make decisions or recommendations that could endanger the public or worker safety.

3. **"Avalanche Safety Plan"**
The word "documented" must be added for if a plan is not documented it cannot be implemented and followed.
4. **"CAA Guidelines"**
Add the phrase "*current edition of the*" as the current wording refers to existing editions of Guidelines and a Guide already publicized. Not making this change would obviate the ability to recognize future editions of these documents.
5. **"Passive Measures"**
Delete the work "*eliminate*" and replace it with "*mitigate*" as risk can be mitigated but never completely eliminated.
6. **Section 4.1.2(2)(a)**
Add the words "*as needed*" as there are those who qualify both as a qualified registered professional and a qualified avalanche planner. The current wording infers that in such cases even though an individual meets the definition of both designations a separate qualified avalanche planner is to be engaged.

The JPB, on behalf of the Councils of APEGBC and ABCFP, very much appreciate the opportunity to comment on the above referenced proposed amendments to the Occupational Health and Safety Regulations. If you have any questions, please feel free to contact me directly at 604-412-4853.

Yours truly,



Peter R. Mitchell, P.Eng.
Director, Professional Standards & Development

PRM/lb

Attachment

PART 4: GENERAL CONDITIONS

Definition	<p>4.1 In this Part “qualified registered professional” means</p> <p style="padding-left: 40px;">a) a professional engineer or a professional geoscientist or licensee as defined in the <i>Engineers and Geoscientists Act</i>, and</p> <p style="padding-left: 40px;">(b) in a forestry operation, includes a professional forester or registered forest technologist, or holder of a special permit as defined in the <i>Foresters Act</i>;</p>
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BUILDINGS, STRUCTURES, EQUIPMENT AND SITE CONDITIONS

Snow avalanche assessment	4.1.2 (1) In this section:	
“active avalanche safety program”		means a program for monitoring daily, or more frequently if conditions warrant, the weather, snow and avalanche conditions, determining temporal fluctuations of avalanche hazards and implementing safety measures, closures or other methods specified in the program to control <u>reduce</u> avalanche risk that has not been eliminated <u>mitigated</u> through use of passive measures;
“avalanche”		means snow avalanche;
“avalanche risk assessment”		means an assessment, <u>involving the application of engineering and geoscience principles</u> , done in accordance with CAA guidelines, of the terrain in and surrounding a workplace to determine if the workplace is at risk from a snow avalanche;
“avalanche risk zone”		means a workplace or part of a workplace where an avalanche risk assessment determines that avalanches pose a risk to people working in the workplace and risk control measures are required to make the area safe for work to be conducted;
“avalanche safety plan”		means a <u>documented plan</u> meeting CAA guidelines, specifying passive measures to eliminate <u>mitigate</u> or reduce the avalanche risk to people working in the workplace and any active avalanche safety program necessary to monitor and manage any avalanche risk that has not been eliminated through use of passive measures;
“CAA guidelines”		means the <u>current edition of the Canadian Avalanche Association guidelines</u> for risk determination, mapping and mitigation for snow avalanche risks as specified in the “Guidelines for Snow Avalanche Risk Determination and Mapping in Canada” and the “Land Managers Guide to Snow Avalanche Hazards in Canada”, published by the Canadian Avalanche Association in 2002;
“qualified avalanche planner”		means a person with at least the minimum training and experience qualifications to be a planner for active avalanche safety programs as specified by the Canadian Avalanche Association and who is (a) a professional member of the Canadian Avalanche Association, (b) a certified guide and a member of the Association of Canadian Mountain Guides, or

<p>"passive measures"</p>	<p>(c) a qualified registered professional; means applying CAA guidelines and other relevant standards and practices in engineering, geoscience and forestry to worksite and facility planning, location, design and use to eliminate mitigate or reduce the risk from avalanches without reliance on an active avalanche safety program, and may include the design and construction of physical defenses against avalanches.</p>
	<p>(2) Before work commences in a workplace where there is or may be a risk to a person working in the workplace from an avalanche, an avalanche risk assessment must be prepared as follows:</p>

	<p>(a) for workplaces involving buildings, construction, logging, transportation corridors or other work areas that will be occupied by people working in the workplace on a permanent, seasonal or scheduled basis, by a qualified registered professional and a qualified avalanche planner, <u>as needed</u> and</p> <p>(b) for wilderness operations where people working in the workplace move over and undertake activities in undeveloped terrain, by a qualified avalanche planner.</p>
	<p>(3) If an avalanche risk assessment conducted under subsection (2) identifies an avalanche risk zone, no work may be conducted in the avalanche risk zone at any time when snow conditions have the potential of creating an avalanche unless an avalanche safety plan has been developed and implemented.</p>
	<p>(4) An avalanche safety plan must have</p> <p>(a) any required passive measures prepared by a qualified registered professional, and</p> <p>(b) any required active avalanche safety program prepared by a qualified avalanche planner.</p>
	<p>(5) If the avalanche safety plan required by subsection (3) includes an active avalanche safety program, a copy of that active avalanche safety program must be readily available to people who administer and implement the avalanche safety program for the workplace.</p>
	<p>(6) An avalanche safety plan must be reviewed to ensure the plan is appropriate and relevant to the conditions and activities for the workplace</p> <p>(a) whenever there is a significant change to the workplace activities contemplated by the plan,</p> <p>(b) whenever there is a significant change to the surface terrain or forest cover of the work area, or</p> <p>(c) at least once every 36 months.</p>
	<p>(7) A review required under subsection (6) must have any passive measures reviewed by a qualified registered professional and any active avalanche safety program reviewed by a qualified avalanche planner, and following the review, the avalanche safety plan must be amended as necessary by the person or persons who conducted the review.</p>

	<p>(8) If an avalanche safety plan specifies procedures to be followed by people working in an avalanche risk zone, every person working in the risk zone must be trained in, and comply with, any procedures applicable to that person's work.</p>
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