

TO: Developers, Land Owners and Qualified Professionals

FROM: Development Services, District of Squamish

DATE: July 28, 2015


RE: Interim Terms of reference for Risk Assessments for new development in the Cheekeye Fan Hazard Area

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On March 24, 2015 Council passed a motion allowing in-stream applications in the Cheekeye hazard area to proceed pending QP safety certification. The Approving Officer will require risk assessments to support any such certification. This memo provides minimum terms of reference that must be addressed in risk assessment reports for the Cheekeye hazard area.

**Terms of Reference:**

- (i) The QP must either have prior experience in performing risk assessments, or have had their risk assessment reviewed by another QP who has experience in performing Quantitative Risk Assessments.
- (ii) The QP must use the magnitude - cumulative frequency relationship determined by Expert Panel #1 (attached).
- (iii) The risk assessment must incorporate multiple hazard events with probabilities up to and including the 1:10,000 year return period.
- (iv) The risk assessment must comply with the methodology laid out in Appendix F of APEGBC Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC.
- (v) On-site, developer-funded mitigation strategies shall be proposed, as required, to achieve a maximum individual annual risk to loss of life of less than 1/100,000.
- (vi) The corresponding societal annual risk tolerance shall be assessed using Figure F-4 in the 2012 APEGBC Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC.
- (vii) The estimated societal risks shall fall within the ALARP (As Low As Reasonably Practicable) or Acceptable zone.
- (viii) Where societal risks fall within the ALARP zone, the risk assessment report must explain to the satisfaction of the Approving Officer why the cost of reducing the risk further is considered grossly disproportionate to the benefit gained (as per the definition of ALARP).



(ix) The District will retain hazard and risk assessment reports for reference upon the conclusion of the land use application.

**Attachments:**

1. Cumulative frequency relationship – Expert panel #1