February 2022

Appendix G

Requirements for Hazard to Life Assessment

- 1. The Applicant shall investigate alternative method to avoid the use of explosives. The Applicant shall carry out hazard assessment as follows:
 - (i) Identify hazardous scenarios associated with the use, transport and overnight storage of the explosives during construction of the Project with a view to determining a set of relevant scenarios to be included in a Quantitative Risk Assessment (QRA);
 - (ii) Execute a QRA of the set of hazardous scenarios determined in 1(i), expressing population risks in both individual and societal terms;
 - (iii) Compare individual and societal risks with the criteria for evaluating hazard to life stipulated in Annex 4 of the TM; and
 - (iv) Identify and assess practicable and cost-effective risk mitigation measures to demonstrate the compliance with the Risk Guidelines.
- 2. The Applicant shall review the Potentially Hazardous Installation (PHI) status of Tai Lam Chung No.2 Chlorination Station (TLCCS). The Applicant shall carry out hazard assessment to evaluate potential hazard to life during construction and operation of the Project due to TLCCS. The hazard assessment shall include the following:
 - (i) Identify hazardous scenarios associated with the on-site transport, storage and use of liquid chlorine at TLCCS with a view to determining a set of relevant scenarios to be included in a QRA;
 - (ii) Execute a QRA of the set of hazardous scenarios determined in 2(i), expressing population risks in both individual and societal terms;
 - (iii) Compare individual and societal risks with the criteria for evaluating hazard to life stipulated in Annex 4 of the TM; and
 - (iv) Identify and assess practicable and cost-effective risk mitigation measures.
- 3. The hazard assessment shall also include a cumulative risk assessment of the Project, through interaction or in combination with other existing, committed and planned developments involving hazardous facilities in the vicinity of the Project.
- 4. The methodology to be used in the hazard assessment should be consistent with previous studies having similar issues.

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