

4. Hazard to Life

4.1 Introduction

This section addresses the issue of hazard to life as required under the EIA Study Brief (ESB-261/2013) if this Project involves any overnight storage of explosives and/or potentially hazardous installation (PHI) or the Project site falls within the consultation zone of any PHI.

A PHI is defined in Section 4, Chapter 12 of Hong Kong Planning Standards and Guidelines (HKPSG) as an installation which stores hazardous materials in quantities equal to or greater than a specified threshold quantity, which varies with different substances.

4.2 Identification of Potential Hazard

Based on Section 4.2.1 of Chapter 12 of HKPSG, the threshold quantities for the more common types of potentially hazardous installation in Hong Kong are as follows:

Table 4.1 Threshold Quantities for Existing PHIs in Hong Kong

| Item | Type | Quantity |
|------|---|--|
| 1 | Liquefied Petroleum Gas storage facilities (in oil terminals, bulk stores & substitute natural gas plant, etc.) | 25 tonnes or more |
| 2 | Town gas installations | 15 tonnes or more |
| 3 | Chlorine stores (mainly at water treatment works) | 10 tonnes or more, or any storage in one tonne drums |
| 4 | Petrol or naphtha stores (mainly at oil depots) | 10,000 tonnes or more |
| 5 | Liquid oxygen storage (mainly at industrial gas facilities) | 500 tonnes or more |
| 6 | Explosive factories/Government explosives depots | any quantity |

This Project is to redevelop the existing theme park areas at Tai Shue Wan into a Water Park. It will involve construction and operation of the facilities including indoor and outdoor zones, general approach area and sewage facilities. General construction activities would be excavation, foundation works, site formation and superstructure.

It is proposed to use the combination of ozone and electro-chlorinator as the sterilisation and disinfection system. Ozone will act as the primary disinfectant and the residual chlorine as secondary disinfection agent. The use of chlorine is not a back-up system. Electro-chlorinator is to generate sodium hypochlorite solution. Only sodium hypochlorite solution will be stored. No on-site storage of liquefied chlorine is required. There will not be any potentially hazardous installation (PHI) within the Project area. The Project area does not fall within the consultation zone of any PHI.

No overnight storage of explosives for this Project is required. Therefore, there will not be any storage of explosive.

4.3 Conclusion

On the basis that no on-site storage of liquefied chlorine and overnight storage of explosives for this Project, hazard is not a concern. Hazard to life to evaluate the potential hazard is therefore not required.