

## Appendix C

# Summary of Implementation Status of Environmental Mitigation



| EIA         | Recommended Environmental Protection Measures/   | Objectives of the recommended measures &                      | Implementation | Imp | lementa<br>Stage |   | Implementation                   | Relevant Legislation &                       |
|-------------|--|---|----------------|-----|------------------|---|----------------------------------|--|
| Reference   | Mitigation Measures  | main concerns to address                                      | Agent          | D   | С                | 0 | status                           | Guidelines                                   |
| Air Quality |  |   |                | 1   | 1                |   |                                  |  |
| S4.8.1      | Impervious dust screen or sheeting will be provided to<br>enclose scaffolding from the ground floor level of<br>building for construction of superstructure of the new<br>buildings.   | Land site/ During<br>Construction                             | Contractor(s)  |     | ~                |   | N/A                              | Air Pollution Control<br>(Construction Dust) |
| S4.8.1      | Impervious sheet will be provided for skip hoist for material transport.   | Land site/ During<br>Construction, particularly dry<br>season | Contractor(s)  |     | ~                |   | N/A                              |  |
| S4.8.1      | The area where dusty work takes place should be<br>sprayed with water or a dust suppression chemical<br>immediately prior to, during and immediately after<br>dusty activities as far as practicable.  | Land site/ During<br>Construction                             | Contractor(s)  |     | •                |   | Implemented after<br>observation |  |
| S4.8.1      | All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.   | Land site/ During<br>Construction                             | Contractor(s)  |     | ~                |   | Implemented                      |  |
| S4.8.1      | Dropping heights for excavated materials should be<br>controlled to a practical height to minimize the fugitive<br>dust arising from unloading.  | Land site/ During<br>Construction                             | Contractor(s)  |     | •                |   | Implemented                      |  |
| \$4.8.1     | During transportation by truck, materials should not be<br>loaded to a level higher than the side and tail boards and<br>should be dampened or covered before transport.   | Land site/ During<br>Construction                             | Contractor(s)  |     | •                |   | Implemented                      |  |
| S4.8.1      | Wheel washing device should be provided at the exits of<br>the work sites. Immediately before leaving a<br>construction site, every vehicle shall be washed to<br>remove any dusty material from its body and wheels as<br>far as practicable. | Land site/ During<br>Construction                             | Contractor(s)  |     | ~                |   | Implemented                      |  |
| S4.8.1      | Road sections between vehicle-wash areas and vehicular entrance will be paved.   | Land site/ During<br>Construction                             | Contractor(s)  |     | ~                |   | N/A                              |  |
| S4.8.1      | Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.  | Land site/ During<br>construction                             | Contractor(s)  | •   | •                |   | Implemented                      |  |



| EIA       | Recommended Environmental Protection Measures/   | Objectives of the recommended measures &               | Implementation | Imp | lementa<br>Stage | ation | Implementation | Relevant Legislation &  |
|-----------|--|--|----------------|-----|------------------|-------|----------------|---|
| Reference | Mitigation Measures  | main concerns to address                               | Agent          | D   | C                | 0     | status         | Relevant Legislation & Guidelines   |
| S4.8.1    | Haul roads will be kept clear of dusty materials and will<br>be sprayed with water so as to maintain the entire road<br>surface wet at all times.  | Land site/ During<br>construction                      | Contractor(s)  |     | ~                |       | Implemented    |   |
| S4.8.1    | Temporary stockpiles of dusty materials will be either<br>covered entirely by impervious sheets or sprayed with<br>water to maintain the entire surface wet all the time.  | Land site/ During<br>construction                      | Contractor(s)  |     | •                |       | Implemented    |   |
| S4.8.1    | Stockpiles of more than 20 bags of cement, dry<br>pulverised fuel ash and dusty construction materials will<br>be covered entirely by impervious sheeting sheltered on<br>top and 3-sides.   | Land site/ During<br>construction                      | Contractor(s)  |     | •                |       | Implemented    |   |
| S4.8.1    | All exposed areas will be kept wet always to minimize dust emission.   | Land site/ During construction                         | Contractor(s)  |     | ~                |       | Implemented    |   |
| S4.8.1    | Ultra-low-Sulphur diesel (ULSD) will be used for all<br>construction plant on-site, as defined as diesel fuel<br>containing not more than 0.005% Sulphur by weight) as<br>stipulated in Environment, Transport and Works Bureau<br>Technical Circular (ETWB-TC(W)) No 19/2005 on<br>Environmental Management on Construction Sites.  | Land site/ During<br>construction/ During<br>Operation | Contractor(s)  |     | •                | •     | Implemented    | and Works Bureau<br>Technical Circular (ETWB-<br>TC(W)) No 19/2005 on<br>Environmental<br>Management on |
| S4.8.1    | The engine of the construction equipment during idling will be switched off.   | Land site/ During construction                         | Contractor(s)  |     | 1                |       | Implemented    | -   |
| S4.8.1    | Concrete batching plant will be required on site. control<br>measures recommended in the Guidance Note on a Best<br>Practicable Means for Cement Works (Concrete<br>Batching Plant) (BPM 3/2 (93)) will be implemented.<br>The control measures recommended in the Guidance<br>Note on a Best Practicable Means for Cement Works<br>(Concrete Batching Plant) (BPM 3/2 (93)) will be<br>implemented. | Land site/ During<br>construction                      | Contractor(s)  |     | •                |       | N/A            | Guidance Note on a Best   |
| S4.8.1    | Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.  | Land site/ During construction                         | Contractor(s)  |     | ~                |       | Implemented    | -   |



| EIA       | Recommended Environmental Protection Measures/   | Objectives of the recommended measures & | Implementation               |   | lementa<br>Stage | ation | Implementation | Relevant Legislation & |
|-----------|--|--|------------------------------|---|------------------|-------|----------------|------------------------|
| Reference | Mitigation Measures  | main concerns to address                 | Agent                        | D | С                | 0     | status         | Guidelines             |
| S4.10     | To ensure proper implementation of the recommended<br>dust mitigation measures and good construction site<br>practices during the construction phase, environmental<br>site audits on weekly basis is recommended throughout<br>the construction period. |  | Contractor(s)/<br>(ET & IEC) |   | ~                |       | Implemented    | -                      |



| EIA<br>Reference | Recommended Environmental Protection Measures/  | Objectives of the<br>recommended measures & | Implementation | Imp | lementa<br>Stage | tion | Implementation | Relevant Legislation &  |
|------------------|---|---|----------------|-----|------------------|------|----------------|---|
|                  | Mitigation Measures   | main concerns to address                    | Agent          | D   | С                | 0    | status         | Guidelines  |
| Noise            | 1   |   | 1              |     | 1 4              |      | 1 1            |   |
| \$5.7            | Only well-maintained plant will be operated on-site and<br>plant will be serviced regularly during the construction<br>phase.   | All area/ During construction               | Contractor(s)  |     | <b>√</b>         |      | Implemented    | A Practical Guide for the<br>Reduction of Noise from<br>Construction Works, |
| \$5.7            | Silencers or mufflers on construction equipment will be<br>utilised and will be properly maintained during the<br>construction phase.   | Noise control/ During construction          | Contractor(s)  |     | ~                |      | N/A            |   |
| S5.7             | Mobile plant, if any, will be sited as far away from NSRs as possible.  | Noise control/ During construction          | Contractor(s)  |     | 1                |      | Implemented    |   |
| S5.7             | Machines and plant (such as trucks) that may be in<br>intermittent use will be shut down between work periods<br>or will be throttled down to a minimum.  | Noise control/ During construction          | Contractor(s)  |     | •                |      | Implemented    |   |
| \$5.7            | Plants known to emit noise strongly in one direction<br>will, wherever possible, be orientated so that the noise is<br>directed away from the nearby NSRs.  | Noise control/ During construction          | Contractor(s)  |     | •                |      | Implemented    |   |
| \$5.7            | Material stockpiles and other structures will be<br>effectively utilised, wherever practicable, in screening<br>noise from on-site construction activities.   | Noise control/ During construction          | Contractor(s)  |     | •                |      | N/A            |   |
| S5.7             | Use of Quite Powered Mechanical Equipment (QPME).   | Noise control/ During construction          | Contractor(s)  |     | 1                |      | Implemented    |   |
| 85.7             | Movable noise barriers of 3m in height with skid footing<br>should be used and located within a few metres of<br>stationary plant and mobile plant such that the line of<br>sight to the NSR is blocked by the barriers. The length<br>of the barrier should be at least five times greater than<br>its height. The noise barrier material should have a<br>superficial surface density of at least 7 kg m <sup>-2</sup> and have<br>no openings or gaps. | Noise control/ During<br>construction       | Contractor(s)  |     | •                |      | N/A            |   |
| S5.7             | The noise insulating sheet should be deployed such that<br>there would be no opening or gaps on the joints.   | Noise control/ During construction          | Contractor(s)  |     | ~                |      | N/A            |   |
| S5.7             | Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.   | Noise control/ During<br>construction       | Contractor(s)  |     | <b>√</b>         |      | Implemented    |   |



| EIA<br>Reference | Recommended Environmental Protection Measures/  | Objectives of the recommended measures &                    | Implementation             | - | ementa<br>Stage | tion | Implementation | Relevant Legislation & |
|------------------|---|---|----------------------------|---|-----------------|------|----------------|------------------------|
| Reference        | Mitigation Measures   | main concerns to address                                    | Agent                      | D | С               | 0    | status         | Guidelines             |
| S5.7             | PMEs will not be used at the works areas near<br>educational institutions with residual impact (i.e. the<br>"influence area" within a radius of 40m) during school<br>hours in order to reduce impact to the educational<br>institutions.   | Noise control / During<br>construction                      | Contractor(s)              |   | •               |      | Implemented    | -                      |
| \$5.7            | Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators.<br>Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m <sup>-2</sup> may be used for screening the noise from operation of the saw/groover, concrete.  | Noise control/ Pre-<br>construction/ During<br>construction | Contractor(s)              | • | ~               |      | N/A            | -                      |
| S5.9             | Saw cutting pavement, breaking up of pavement,<br>excavation /shoring, pipe laying, backfilling,<br>reinstatement (concrete) and pipe jacking shall be<br>scheduled outside the examination period.   | Noise control/ Pre-<br>construction/ During<br>construction | Contractor(s)              | • | ~               |      | Implemented    | -                      |
| \$5.9            | In view the duration of noise exceedance at Creative<br>Secondary School, PLK Laws Foundation College, TKO<br>Kei Tak Primary School and School of Continuing and<br>Professional Studies-CUHK is limited to 8 weeks, the<br>construction work in the influence areas near the four<br>schools shall be scheduled during long school holidays<br>(e.g. summer holiday, Easter holiday or Christmas<br>holiday, etc.) as far as practicable. Scheduling the<br>construction work for the four schools. | Noise control/ Pre-<br>construction/ During<br>construction | Contractor(s)              | ~ | ~               |      | Implemented    | _                      |
| S5.10            | A noise monitoring programme shall be implemented for the construction phase.   | During construction phase                                   | ET                         |   | 1               |      | Implemented    | -                      |
| S5.10            | The effectiveness of on-site control measures could also<br>be evaluated through the regular site audits.   | All facilities/ During construction                         | Contractor(s)/<br>ET & IEC |   | ~               |      | Implemented    | -                      |



| EIA<br>Reference | Recommended Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the recommended measures &     | Implementation | Imp | ementa<br>Stage | tion | Implementation<br>status         | Relevant Legislation &<br>Guidelines          |
|------------------|---|--|----------------|-----|-----------------|------|----------------------------------|---|
|                  |   | main concerns to address                     | Agent          | D   | С               | 0    | status                           | Guidennes                                     |
| Water Qual       | •   |  | ſ              |     | <u> </u>        | 1    | I                                |   |
| S6.9             | Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly. | Land site & drainage/ During<br>construction | Contractor(s)  |     | ~               |      | Implemented<br>after observation | ProPECC PN 1/94 TM<br>Standard under the WPCO |
| S6.9             | Earthworks to form the final surfaces will be followed<br>up with surface protection and drainage works to<br>prevent erosion caused by rainstorms.   | Land site & drainage/ During<br>construction | Contractor(s)  |     | ~               |      | Implemented                      | -   |
| S6.9             | Appropriate surface drainage will be designed and provided where necessary.   | Land site & drainage/ During construction    | Contractor(s)  |     | ~               |      | Implemented                      | -   |
| \$6.9            | The precautions to be taken at any time of year when<br>rainstorms are likely together with the actions to be<br>taken when a rainstorm is imminent or forecasted and<br>actions to be taken during or after rainstorms are<br>summarised in Appendix A2 of ProPECC PN 1/94.  | Land site & drainage/ During<br>construction | Contractor(s)  |     | -               |      | Implemented                      | ProPECC PN 1/94                               |
| \$6.9            | Oil interceptors will be provided in the drainage system<br>where necessary and regularly emptied to prevent the<br>release of oil and grease into the storm water drainage<br>system after accidental spillages.   | Land site & drainage/ During<br>construction | Contractor(s)  |     | •               |      | N/A                              | -   |
| \$6.9            | Temporary and permanent drainage pipes and culverts<br>provided to facilitate runoff discharge, if any, will be<br>adequately designed for the controlled release of storm<br>flows.  | Land site & drainage/ During<br>construction | Contractor(s)  |     | •               |      | N/A                              | -   |
| S6.9             | The temporary diverted drainage, if any, will be<br>reinstated to the original condition when the<br>construction work has finished or when the temporary<br>diversion is no longer required.   | Land site & drainage/ During<br>construction | Contractor(s)  |     | •               |      | N/A                              | -   |

### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report



| EIA<br>Reference  | Recommended Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>recommended measures &<br>main concerns to address | Implementation<br>Agent    | - | ementa<br>Stage<br>C | tion<br>O | Implementation<br>status         | Relevant Legislation &<br>Guidelines   |
|-------------------|--|---|----------------------------|---|----------------------|-----------|----------------------------------|--|
| S6.9              | Appropriate numbers of portable toilets shall be<br>provided by a licensed contractor to serve the<br>construction workers over the construction site to<br>prevent direct disposal of sewage into the water<br>environment.   | Land site & drainage/ During<br>construction                            | Contractor(s)              |   | •                    |           | Implemented                      | -  |
| S6.9 and<br>S6.12 | The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer. | Sterilization of water mains prior to commissioning                     | Contractor(s)              |   | •                    | •         | N/A                              | Technical Memorandum<br>for Effluents Discharged<br>into Drainage and<br>Sewerage Systems Inland<br>and Coastal Waters |
| \$6.9             | The cleaning and flushing water should also be treated<br>and desilted to the relevant discharge requirement<br>stipulated in TM-DSS before discharging.   | Sterilization of water mains prior to commissioning                     | Contractor(s)              |   | •                    | •         | N/A                              |  |
| S6.9              | Site drainage should be well maintained, and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.  | Land site & drainage/ During<br>construction/ During<br>operation       | Contractor(s)              |   | *                    | *         | Implemented after<br>observation | -  |
| S6.12             | Regular site inspections will be carried out in order to<br>confirm that regulatory requirements are being met and<br>that contractors are implementing the standard site<br>practice and mitigation measures as proposed to reduce<br>potential impacts to water quality.   | During construction   | Contractor(s)/<br>ET & IEC |   | ~                    |           | Implemented after<br>observation | -  |

Note: D – Design stage C – Construction O – Operation



| EIA<br>Reference | Recommended Environmental Protection Measures/  | Objectives of the recommended measures &              | Implementation | Imp | lementa<br>Stage | ation    | Implementation<br>Status | Relevant Legislation &<br>Guidelines  |
|------------------|---|---|----------------|-----|------------------|----------|--------------------------|---|
|                  | Mitigation Measures   | main concerns to address                              | Agent          | D   | С                | 0        | Status                   | Guidennes   |
| Waste Man        |   |   | -              | 1   | 1 .              | <b>1</b> | 1                        |   |
| \$8.5            | Nomination of approved personnel to be responsible for<br>standard site practices, arrangements for collection and<br>effective disposal to an appropriate facility of all wastes<br>generated at the site.   | Contract mobilization/<br>During construction         | Contractor(s)  |     | ~                |          | Implemented              | -   |
| \$8.5            | Training of site personnel in proper waste management<br>and chemical handling procedures. Training will be<br>provided to workers on the concepts of site cleanliness<br>and appropriate waste management procedures,<br>including waste reduction, reuse and recycling at the<br>beginning of the construction works.   | Contract mobilization/<br>During construction         | Contractor(s)  |     | •                |          | Implemented              | -   |
| S8.5             | Provision of sufficient waste disposal points and regular collection for disposal.  | All area/ During<br>construction/ During<br>operation | Contractor(s)  |     | ~                | •        | Implemented              | DEVB TC(W) No. 8/2010,<br>Enhanced Specification for<br>Site Cleanliness and<br>Tidiness.   |
| S8.5             | Appropriate measures to reduce windblown litter and<br>dust transportation of waste by either covering trucks or<br>by transporting wastes in enclosed containers.  | All area/ During construction                         | Contractor(s)  |     | •                |          | Implemented              | DEVB TC(W) No. 8/2010,<br>Enhanced Specification for<br>Site Cleanliness and<br>Tidiness.   |
| S8.5             | A waste management plan (WMP) as stated in the " <i>ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites</i> " for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation. | All area/ During construction                         | Contractor(s)  |     | ~                |          | Implemented              | ETWB TC(W) No.<br>19/2005,<br>Environmental<br>Management on<br>Construction Sites  |
| S8.5             | Separation of chemical wastes for special handling and<br>appropriate treatment at the Chemical Waste Treatment<br>Centre at Tsing Yi.  | All area/ During construction                         | Contractor(s)  |     | •                |          | N/A.                     | Chapters 2 & 3 Code of<br>Practice on the Packaging,<br>Labelling & Storage of<br>Chemical Wastes published<br>under the Waste Disposal<br>Ordinance (Cap 354),<br>Section 35 |



| EIA       | Recommended Environmental Protection Measures/   | sures/ recommended measures & Implementation           |                       | Imp | lementa<br>Stage | ation | Implementation                | Relevant Legislation &   |
|-----------|--|--|-----------------------|-----|------------------|-------|-------------------------------|--|
| Reference | Mitigation Measures  | main concerns to address                               | Agent                 | D   | С                | 0     | Status                        | Guidelines   |
| S8.5      | Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.   | Land site/ During construction                         | Contractor(s)         |     | •                |       | Implemented                   | Waste Disposal Ordinance<br>(Cap 354)  |
| S8.5      | A recording system for the amount of wastes generated/<br>recycled and disposal sites. The trip- ticket system will<br>be included as one of the contractual requirements and<br>implemented by the contractor(s).     | Land site/ During construction                         | Contractor(s)         |     | <b>√</b>         |       | Implemented                   | DEVB TC(W) No. 6/2010,<br>Trip Ticket System for<br>Disposal of Construction &<br>Demolition Materials |
| S8.5      | Segregation and storage of different types of waste in<br>different containers, skips or stockpiles to enhance reuse<br>or recycling of material and their proper disposal.  | Land site/ During<br>construction/ During<br>operation | Contractor(s)         |     | <b>~</b>         |       | Implemented                   | WBTC 32/92, The Use of<br>Tropical Hard Wood on<br>Construction Site                                   |
| S8.5      | Encourage collection of aluminium cans and<br>wastepaper by individual collectors during construction<br>with separate labelled bins provided to segregate these<br>wastes from other general refuse by the workforce. | Land site/ During construction                         | Contractor(s)         |     | •                |       | Implemented                   | ETWB TCW No. 33/2002,<br>Management of<br>Construction and<br>Demolition Material<br>Including Rock    |
| S8.5      | Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.   | Land site/ During construction                         | Contractor(s)         |     | 1                |       | N/A                           | -  |
| S8.5      | Use of reusable non-timber formwork to reduce the amount of C&D materials.   | All areas/ During construction                         | Contractor(s)         |     | •                |       | N/A                           | WBTC 32/92, The Use of<br>Tropical Hard Wood on<br>Construction Site                                   |
| S8.5      | Prior to disposal of construction waste, wood, steel and<br>other metals will be separated to the extent practical, for<br>re-use and/or recycling to reduce the quantity of waste<br>to be disposed of to landfill.   | All areas/ During construction                         | Contractor(s)         |     | •                |       | Implemented                   | DEVB TC(W) No. 6/2010,<br>Trip Ticket System for<br>Disposal of Construction &<br>Demolition Materials |
| S8.5      | Proper storage and site practices to reduce the potential for damage or contamination of construction materials.   | All areas/ During construction                         | Contractor(s)         |     | 1                |       | Implemented after observation | -  |
| \$8.5     | Plan and stock construction materials carefully to<br>reduce amount of waste generated and avoid<br>unnecessary generation of waste.   | All areas/ During construction                         | Contractor(s)         |     | •                |       | Implemented                   | -  |
| S8.5      | The management of dredged/ excavated sediment<br>management requirement from ETWB TC(W) No.<br>34/2002 will be incorporated in the Specification of the<br>Contract Documents.   | Marine works/ During<br>construction                   | WSD/<br>Contractor(s) |     | <b>√</b>         |       | Implemented                   | ETWB TC(W) No. 34/2002<br>and Dumping at Sea<br>Ordinance (DASO)                                       |



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|-----------|---|---|----------------------------|-----|------------------|-------|----------------|--|
| Reference | Mitigation Measures   | main concerns to address                                      | Agent                      | D   | C                | 0     | Status         | Guidelines   |
| S8.5      | The contractor will open a billing account with EPD in<br>accordance with the Waste Disposal (Charges for<br>Disposal of Construction Waste) Regulation for the<br>payment of disposal charges.   | Contract mobilisation/ During<br>construction                 | Contractor(s)              |     | •                |       | Implemented    | Cap 354N Waste Disposal<br>(Charges for Disposal of<br>Construction Waste)<br>Regulation               |
| S8.5      | A trip-ticket system will be established in accordance<br>with DEVB TC(W) No. 6/2010 to monitor the reuse of<br>surplus excavated materials off-site and disposal of<br>construction waste and general refuse at transfer<br>facilities/ landfills, and to control fly-tipping. | Contract mobilisation/<br>During construction                 | Contractor(s)              |     | *                |       | Implemented    | DEVB TC(W) No. 6/2010,<br>Trip Ticket System for<br>Disposal of Construction &<br>Demolition Materials |
| S8.5      | The project proponent will also conduct regular<br>inspection of the waste management measures<br>implemented on site as described in the Waste<br>Management Plan.   | All area/ During construction                                 | Contractor(s)/<br>ET & IEC |     | •                |       | Implemented    | ETWB TC(W) No. 19/2005,<br>Environmental<br>Management on<br>Construction Sites                        |
| \$8.5     | A recording system (similar to summary table as shown<br>in Annex 5 and Annex 6 of Appendix G of ETWB<br>TC(W) No. 19/2005) for the amount of waste generated,<br>recycled and disposed of (including the disposal sites)<br>will be established during the construction phase. | All area/ During construction                                 | Contractor(s)              |     | •                |       | Implemented    | Annex 5 and Annex 6 of<br>Appendix G of ETWB<br>TC(W) No. 19/2005                                      |
| \$8.5     | Inert C&D materials (public fill) will be reused within<br>the Project as far as practicable.   | All area/ During construction                                 | Contractor(s)              |     | ~                |       | Implemented    | -  |
| S8.5      | Public fill and construction waste shall be segregated<br>and stored in different containers or skips to facilitate<br>reuse or recycling of materials and their proper disposal.   | All area/ During construction                                 | Contractor(s)              |     | ~                |       | Implemented    | -  |
| S8.5      | Specific areas of the work site will be designated for<br>such segregation and storage if immediate use is not<br>practicable.  | All area/ During construction                                 | Contractor(s)              |     | •                |       | Implemented    | -  |
| S8.5      | To reduce the potential dust and water quality impacts<br>of site formation works, C&D materials will be wetted<br>as quickly as possible to the extent practice after filling.   | All area/ During construction                                 | Contractor(s)              |     | •                |       | Implemented    | Air Pollution Control<br>(Construction Dust)<br>Regulation (Cap 311R);<br>WPCO (Cap 358)               |
| S8.5      | Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.   | Land site/ During<br>Construction, particularly<br>dry season | Contractor(s)              |     | •                |       | Implemented    | Air Pollution Control<br>(Construction Dust)<br>Regulation (Cap 311R)                                  |



| EIA       | Recommended Environmental Protection Measures/  | Objectives of the recommended measures &           | Implementation        | Imp | lementa<br>Stage |   | Implementation                   | Relevant Legislation &  |
|-----------|---|--|-----------------------|-----|------------------|---|----------------------------------|---|
| Reference | Mitigation Measures   | main concerns to address                           | Agent                 | D   | C                | 0 | Status                           | Guidelines  |
| S8.5      | Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | •                | • | Implemented after<br>observation | Waste Disposal (Chemical<br>Waste) (General)<br>Regulation; Code of<br>Practice on the Packaging, |
| \$8.5     | Chemical waste container shall have a capacity of less<br>than 450 L unless the specifications have been approved<br>by the EPD.  | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | 1                | ~ | Implemented                      | Handling and Storage of<br>Chemical Wastes  |
| \$8.5     | A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.  | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | •                | ~ | Implemented                      |   |
| \$8.5     | Storage areas for chemical waste shall be enclosed on at least 3 sides.   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | 1                | 1 | Implemented                      |   |
| S8.5      | Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest. | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | -                | • | Implemented                      |   |
| \$8.5     | Storage areas for chemical waste shall have adequate ventilation.   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | ~                | ~ | Implemented                      |   |
| \$8.5     | Storage areas for chemical waste shall be covered to<br>prevent rainfall entering (water collected within the<br>bund must be tested and disposed of as chemical waste,<br>if necessary).   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | -                | • | Implemented                      |   |
| S8.5      | Storage areas for chemical waste shall be arranged so<br>that incompatible materials are appropriately separated.   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | ~                | ~ | Implemented                      |   |
| S8.5      | General refuse will be stored in enclosed bins or<br>compaction units separately from construction and<br>chemical wastes.  | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | -                | ~ | Implemented after reminder       |   |
| S8.5      | Adequate number of waste containers will be provided<br>to avoid over-spillage of waste.  | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | •                | * | Implemented                      | DEVB TC(W) No. 8/2010<br>Enhanced Specification for<br>Site Cleanliness and<br>Tidiness.          |



| EIA<br>Reference | Recommended Environmental Protection Measures/   | Objectives of the recommended measures &           | Implementation        | Imp | lementa<br>Stage |   | Implementation<br>Status | Relevant Legislation &<br>Guidelines         |
|------------------|--|--|-----------------------|-----|------------------|---|--------------------------|--|
| Kelerence        | Mitigation Measures  | main concerns to address                           | Agent                 | D   | С                | 0 | Status                   | Guidennes                                    |
| S8.5             | A reputable waste collector will be employed by the<br>Contractor to remove general refuse from the site,<br>separately from construction and chemical wastes, on a<br>daily basis to minimise odour, pest and litter impacts.   | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | •                | • | Implemented              | -  |
| \$8.5            | Recycling bins will be provided at strategic locations<br>within the Site to facilitate recovery of recyclable<br>materials (including aluminium can, waste paper, glass<br>bottles and plastic bottles) from the Site. Materials<br>recovered will be sold for recycling. | All area/ During construction/<br>During operation | Contractor(s)/<br>WSD |     | •                | • | Implemented              | -  |
| \$8.5            | To avoid any odour and litter impact, accurate number<br>of portable toilets will be provided for workers on-site.   | All area/ During construction                      | Contractor(s)         |     | ~                |   | Implemented              | -  |
| \$8.5            | The burning of refuse on construction sites is prohibited by law.  | All area/ During construction                      | Contractor(s)         |     | •                |   | Implemented              | Air Pollution Control<br>Ordinance (Cap 311) |
| \$8.7            | To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.  | All facilities/ During construction                | ET/ IEC               |     | •                |   | Implemented              | -  |

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| EIA<br>Reference | Recommended Environmental Protection Measures/   | Objectives of the recommended measures & | Implementation                               | Imp | lementa<br>Stage | ntion | Implementation | Relevant Legislation &<br>Guidelines |
|------------------|--|--|--|-----|------------------|-------|----------------|--------------------------------------|
| Reference        | Mitigation Measures  | main concerns to address                 | Agent  | D   | С                | 0     | Status         | Guidennes                            |
| Ecology          |  |  |  |     |                  |       |                |                                      |
| S9.7             | Erect fences along the boundary of the works area before<br>the commencement of works to prevent vehicle<br>movements and encroachment of personnel onto<br>adjacent areas.  | All area/ During construction            | Contractor(s)                                |     | •                |       | Implemented    | -                                    |
| S9.7             | Regularly check the work site boundaries to ensure that<br>they are not breached and that damage does not occur to<br>surrounding areas.   | All area/ During construction            | Contractor(s)/<br>Environmental<br>Team (ET) |     | •                |       | Implemented    | -                                    |
| S9.7             | Avoid any damage and disturbance, particularly those<br>caused by filling and illegal dumping, to the surrounding<br>habitats through proper management of waste disposal.   | All area/ During construction            | Contractor(s)                                |     | ~                |       | Implemented    | -                                    |
| \$9.7            | Reinstate temporarily affected areas, particularly the<br>habitats of plantation and shrubland-grassland<br>immediately after completion of construction works,<br>through on-site tree/shrub planting. The tree/shrub<br>species will be chosen with reference to those in the<br>surrounding area. | All area/ During construction            | Contractor(s)                                |     | •                |       | N/A            | -                                    |

Note: D – Design stage C – Construction O – Operation



| EIA<br>Reference   | Recommended Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the recommended measures &                               | Implementation<br>Agent | Im       | plement<br>Stage |          | Implementation<br>Status         | Relevant Legislation &<br>Guidelines        |  |
|--------------------|--|--|-------------------------|----------|------------------|----------|----------------------------------|---|--|
| Reference          | initigation incusures  | main concerns to address   | ngent                   | D        | С                | 0        | Status                           | Guidelines                                  |  |
| Landscap           | e & Visual   |  |                         |          |                  |          |                                  |   |  |
| S11.10<br>& 11.11  | The construction area and area allowed for temporary<br>structures, such as the contractor's office, will be<br>minimized to a practical minimum. (MM1)  | All area/ Detailed design/<br>During construction/ During<br>operation | WSD/<br>Contractor(s)   | <b>√</b> | ✓                | <b>√</b> | Implemented                      | -   |  |
| S11.10<br>& 11.11  | At the detailed design stage, the design team will seek to<br>minimize the landscape footprint of the Project and<br>above ground facilities, while satisfying all other<br>requirements. (MM2)  | All area/ Detailed design/<br>During construction/ During<br>operation | WSD/<br>Contractor(s)   | •        | •                | •        | Implemented                      | -   |  |
| \$11.10<br>& 11.11 | Design principles will be adopted to take into account<br>the surrounding area, particularly Clear Water Bay<br>Country Park behind and the nearby waterfront, with due<br>consideration given to:<br>- roadside planting;<br>- aesthetic treatment of all structures;<br>- vertical greening;<br>- screen planting along application site; and<br>- landscape enhancement with amenity planting where<br>practical including planting along the edge (site<br>boundary) fence with native shrubs where feasible to<br>reduce their visual impact and blend them into the<br>surrounding landscape.(MM3) | All area/ Detailed design/<br>During construction/ During<br>operation | WSD/<br>Contractor(s)   |          |                  |          | Implemented                      | -   |  |
| S11.10<br>& 11.11  | All trees within the Project Site or the potential slope<br>mitigation works area will be carefully protected during<br>construction according to DEVB TCW No. 10/2013 –<br>Tree Preservation (MM4)  | All area/ Detailed design/<br>During construction/ During<br>operation | WSD/<br>Contractor(s)   | ~        | <b>√</b>         | ✓        | Implemented after<br>observation | ETWB TCW No. 3/2006 -<br>Tree Preservation. |  |
| \$11.10<br>& 11.11 | No tree within the Country Park will be felled. Trees<br>within the Site unavoidably affected by the works will<br>be transplanted where necessary and practical. For trees<br>that need to be felled, compensatory planting will be<br>provided to the satisfaction of relevant Government<br>departments.<br>A compensatory tree planting proposal including<br>locations of tree compensation will be submitted to seek<br>relevant government department's approval, in<br>accordance with DEVB TC(W) No. 10/2013. (MM5)   | All area/ Detailed design/<br>During construction/ During<br>operation | WSD/<br>Contractor(s)   | •        | ✓                | *        | N/A                              | DEVB TC(W) No.<br>10/2013                   |  |



| EIA<br>Reference | Recommended Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the recommended measures &                               | Implementation<br>Agent | Im  | plement<br>Stage |          | Implementation<br>Status | Relevant Legislation &<br>Guidelines |
|------------------|--|--|-------------------------|-----|------------------|----------|--------------------------|--------------------------------------|
|                  | , , , , , , , , , , , , , , , , , , ,  | main concerns to address   | ngent                   | D   | С                | 0        | Status                   | Guidelines                           |
| Landfill G       |  |  | ſ                       | 1 4 | <u> </u>         | <u> </u> | T                        |                                      |
| S12.7            | During all works, safety procedures should be<br>implemented to minimise the risks of fires and<br>explosions, asphyxiation of workers and toxicity effects<br>resulting from contact with contaminated soil and<br>groundwater.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | ~   | •                | ~        | Implemented              | -                                    |
| S12.7            | During trenching and excavation as well as creation of<br>confined spaces at near to or below ground level,<br>precautions should be clearly laid down and rigidly Gas<br>detection equipment and appropriate breathing<br>apparatus should be available and used when entering<br>confined spaces or trenches deeper than 1 metre.  | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | •   | •                | <b>√</b> | Implemented              |                                      |
| \$12.7           | The Contractor should make the workers are aware of<br>potential hazards of working in confined spaces (any<br>chamber, manhole or culvert which is large enough to<br>permit access to personnel). Such work in confined<br>spaces is controlled by the Factories and Industrial<br>Undertakings (Confined Spaces) Regulations of the<br>Factories and Industrial Undertakings Ordinance.<br>Following the Safety Guide to Working in Confined<br>Spaces ensures compliance with the above regulations. | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | •   | *                | -        | Implemented              |                                      |
| S12.7            | Safety officers, specifically trained with regard to<br>landfill gas and leachate related hazards and the<br>appropriate actions to take in adverse circumstances,<br>should be present on the site throughout the works, in<br>particular, when works are undertaken below grade.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | •   | •                | •        | Implemented              |                                      |
| S12.7            | All personnel who work on site and all visitors to the site<br>should be made aware of the possibility of ignition of<br>gas in the vicinity of the works, the possible presence of<br>contaminated water and the need to avoid physical<br>contact with it.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | •   | •                | •        | Implemented              |                                      |
| S12.7            | Monitoring for landfill gas should be undertaken in all<br>excavations, manholes, chambers (particularly during<br>pipe jacking) and any confined spaces through the use of<br>an intrinsically safe portable instrument, appropriately<br>calibrated and capable of measuring the concentrations  | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s)           | ~   | •                | ~        | Implemented              |                                      |

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|       |   |  |               | -        |   |          |             | 1 |
|-------|---|--|---------------|----------|---|----------|-------------|---|
|       | of methane. carbon dioxide and oxygen.  |  |               |          |   |          |             |   |
| S12.7 | Monitoring frequency and areas to be monitored should<br>be specified prior to commencement of groundwork,<br>either by the Safety Officer, or by an appropriately<br>qualified person. All measurements should be recorded<br>and documented.  | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s) | •        | • | ✓<br>    | Implemented |   |
| S12.7 | Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s) | <b>√</b> | ~ | ~        | Implemented |   |
| S12.7 | Prior to the commencement of the site works, the drilling<br>contractor should devise a 'method-of- working'<br>statement covering all normal and emergency<br>procedures (including but not limited to number of<br>operatives, experience and special skills of operatives,<br>normal method of operations, emergency procedures,<br>supervisors' responsibilities, storage and use of safety<br>equipment, safety procedures and signs, barriers and<br>guarding). The site supervisor and all operatives must be<br>familiar with this statement. | All area/ During<br>construction/ During<br>operation                  | Contractor(s) | ~        | ~ | ~        | Implemented |   |
| S12.7 | Where below ground service entries are necessary to the<br>Incoming Switchgear Room, 132 kV Substation and<br>Chlorine Store (I) and (II), the entry point should be<br>sealed to prevent gas entry. In addition, any below<br>grade cable trenches entering the Incoming Switchgear<br>Room and 132 kV Substation can become the pathway<br>for landfill gas and hence grilled metal covers should be<br>used.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s) | •        | • | <b>v</b> | N/A         |   |
| S12.7 | It is recommended regular landfill gas monitoring should<br>be carried out at the Incoming Switchgear Room, 132 kV<br>Substation and Chlorine Store (I) and (II). The<br>monitoring frequency will be monthly for the first year<br>of operation. If the monitoring results show no sign of<br>landfill gas migration, reduce the monitoring frequency<br>to once every six months.   | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s) | *        | ¥ | ✓<br>    | N/A         |   |
| S12.7 | The manholes and utility pits within the Project Site and<br>along the fresh water mains. Each manhole/ utility pit<br>should be monitored with two measurements (at mid<br>depth and base). Each measurement should be monitored<br>for a minimum of 10 minutes. A steady reading and peak<br>reading should be recorded at each manhole/ utility pit  | All area/ Detailed design/<br>During construction/<br>During operation | Contractor(s) | •        | • | -        | Implemented |   |



|       | and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.   |               |   |   |   |             |
|-------|---|---------------|---|---|---|-------------|
| S12.7 | All construction, operation and maintenance personnel<br>working on-site as well as visitors should be made aware<br>of the hazards of landfill gas and its possible presence<br>on-site. This should be achieved through a combination<br>of posting warning signs in prominent places and also by<br>access to detailed information on landfill gas hazards | Contractor(s) | • | ~ | ~ | Implemented |
|       | and the designs and procedural means by which these hazards are being minimized on-site.  |               |   |   |   |             |