

## **H. Implementation Schedule of Environmental Mitigation Measures**

## Environmental Mitigation Measures Implementation Status

### Recommended Mitigation Measures for Air Quality Impact

| EIA Ref.   | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|--|------------------|--|------------------------------------|
| S3.5.4.2   | S3.3             | <ul style="list-style-type: none"> <li>Use of regular watering once per two hours to reduce dust emissions from all exposed site surfaces with dust emission and unpaved roads, particularly during dry weather.</li> </ul>  | Obs.                               |
|  |                  | <ul style="list-style-type: none"> <li>Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Open stockpiles shall be avoided or covered. Prevent placing dusty material storage piles near Air Sensitive Receivers (ASRs).</li> </ul>   | Obs.                               |
|  |                  | <ul style="list-style-type: none"> <li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Imposition of speed controls for vehicles on unpaved site roads, 8km per hour is the recommended limit.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Routing of vehicles and position of construction plant should be at the maximum possible distance from ASRs.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.</li> </ul>   | Obs.                               |
|  |                  | <ul style="list-style-type: none"> <li>Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed.</li> </ul>   | Not Obs.                           |
| S3.5.2.25  | S3.3             | <ul style="list-style-type: none"> <li>Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.</li> </ul> | Obs.                               |
|  |                  | <ul style="list-style-type: none"> <li>Watering on heavy construction work areas to reduce dust emission. Any potential dust impact and watering mitigation would be subject to the actual site condition.</li> </ul>  | Yes                                |
| S3.5.4.3   | S3.3             | <ul style="list-style-type: none"> <li>Connect construction plant and equipment to main electricity supply and avoid use of diesel generators and diesel-powered equipment.</li> </ul>   | Not Obs.                           |
|  |                  | <ul style="list-style-type: none"> <li>Switch off the engine of Powered Mechanical Equipment (PME) when idling.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Implement regular and proper maintenance for plant and equipment.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Employ plant and equipment of adequate size and power output and avoid overloading of the plant.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Locate the PME away from sensitive receivers as far as possible.</li> </ul>   | Yes                                |
| <ul style="list-style-type: none"> <li>Erect screen to shield the emission source from sensitive receivers where necessary and practicable.</li> </ul> | Yes              |  |                                    |

| EIA Ref.                                 | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|--|------------------|--|------------------------------------|
| <b>Non-Road Mobile Machinery (NRMMS)</b> |                  |  |                                    |
|  |                  | <ul style="list-style-type: none"> <li>Avoid usage of exempted NRMMS as far as practicable.</li> </ul>   | Obs.                               |
|  |                  | <ul style="list-style-type: none"> <li>Deploy electrified NRMMS and PME as far as practicable.</li> </ul>  | Not Obs.                           |
|  |                  | <ul style="list-style-type: none"> <li>Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are followed to control potential emissions from non-road mobile machinery during construction phase where appropriate.</li> </ul> | Obs                                |
| S3.7                                     | S3.3             | <ul style="list-style-type: none"> <li>Implement regular dust monitoring under EM&amp;A programme during the construction phase.</li> </ul>  | Yes                                |

**Recommended Mitigation Measures for Noise Impact**

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^             |
|----------|------------------|---|--|
| --       | S4.2.2           | <ul style="list-style-type: none"> <li>All mitigation measures recommended and requirements specified in the Construction Noise Management Plan (CNMP) and the updated CNMP shall be fully implemented. Implementation of plant inventory recommended in the submitted CNMP.</li> </ul>       | Yes  |
|          |                  | <ul style="list-style-type: none"> <li>Hydraulic concrete crusher should be used for rock breaking activities during site establishment, instead of traditional hydraulic breaker</li> </ul>  | Not applicable according to the submitted CNMP |
| S4.5.4.2 | S4.2.1           | <ul style="list-style-type: none"> <li>Non-explosive chemical expansion agent should be used for concrete breaking activities during site establishment, instead of traditional hydraulic breaker.</li> </ul>   | Not applicable according to the submitted CNMP |
|          |                  | <ul style="list-style-type: none"> <li>Self-compacting concrete will be used for concreting works, instead of traditional vibratory poker.</li> </ul>   | Not applicable according to the submitted CNMP |
|          |                  | <ul style="list-style-type: none"> <li>Silent piling by Press-in Method (Press-in piling) will be used for sheet piling works, instead of traditional massive augering and piling machines.</li> </ul>  | Not Obs.                                       |
| S4.5.4.3 | S4.2.1           | <ul style="list-style-type: none"> <li>Use of quieter Powered Mechanical Equipment is recommended to reduce the noise impact.</li> </ul>  | Yes  |
| S4.5.4.4 | S4.2.1           | <ul style="list-style-type: none"> <li>The use of noise barrier for certain PME (Powered Mechanical Equipment) could generally provide a 5 dB(A) reduction for movable PME and 10 dB(A) for stationary PME. The barrier material shall be long enough and have no opening or gaps.</li> </ul> | Not Obs.                                       |
| --       | S4.2.1           | <ul style="list-style-type: none"> <li>Use of Hammer Bracket:<br/>Tuned mass dampers, tailored breaker cloth and noise mitigating plastic skirt on the breaker head of Hydraulic Breaker.</li> </ul>  | Not Obs.                                       |

| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|---|------------------|---|------------------------------------|
|   |                  | <b>The following good site practices should be implemented to limit noise emissions:</b>  |                                    |
|   |                  | <ul style="list-style-type: none"> <li>Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction period. Mobile plant, if any, should be sited as far from Noise Sensitive Receivers (NSRs) as possible. Machines and plant that may be used intermittently should be shut down between works periods or should be throttled down to a minimum.</li> </ul> | Yes                                |
| S4.5.4.9  | S4.2.1           | <ul style="list-style-type: none"> <li>Plant known to emit noise strongly in one direction should, wherever possible, be properly orientated so that the noise is directed away from the nearby NSRs.</li> </ul>  | Not Obs.                           |
|   |                  | <ul style="list-style-type: none"> <li>Use of site hoarding as a noise barrier to screen noise at low level NSRs. Machines and plant that may be used intermittently should be shut down between works periods or should be throttled down to a minimum.</li> </ul>   | Not Obs.                           |
|   |                  | <ul style="list-style-type: none"> <li>Any material stockpiles and other structures should be effectively utilised, wherever practicable, to screen the noise from on-site construction activities.</li> </ul>  | Yes                                |
| <b>Recommended Mitigation Measures for Water Quality Impact</b> |                  |   |                                    |
| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|   |                  | <ul style="list-style-type: none"> <li>At most 2 marine piles will be constructed concurrently at the marine viaduct works area across Tung Chung Navigation Channel.</li> </ul>  | Marine works not commenced yet     |
|   |                  | <b>Silt Curtain Deployment Plan</b>   |                                    |
|   |                  | <ul style="list-style-type: none"> <li>Silt curtain would be set up to enclose the entire active work area before commencement of piling works for marine viaduct to control sediment dispersion.</li> </ul>  | Marine works not commenced yet     |
| S5.9.1.1  | S5.2             | <ul style="list-style-type: none"> <li>The Plan shall be fully and properly implemented.</li> </ul>   | Marine works not commenced yet     |
|   |                  | <ul style="list-style-type: none"> <li>All vessels shall be sized such that adequate clearance is maintained between vessels and the seabed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.</li> </ul>  | Marine works not commenced yet     |
|   |                  | <ul style="list-style-type: none"> <li>All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment.</li> </ul>   | Marine works not commenced yet     |
|   |                  | <ul style="list-style-type: none"> <li>All vessels must have a clean ballast system.</li> </ul>   | Marine works not commenced yet     |

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|----------|------------------|---|------------------------------------|
|          |                  | <ul style="list-style-type: none"> <li>Marine works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.</li> </ul>  | Marine works not commenced yet     |
|          |                  | <ul style="list-style-type: none"> <li>Wastewater from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system.</li> </ul>   | Marine works not commenced yet     |
|          |                  | <ul style="list-style-type: none"> <li>No solid waste is allowed to be disposed overboard.</li> </ul>   | Marine works not commenced yet     |
|          |                  | <ul style="list-style-type: none"> <li>Best Management Practices (BMPs) of mitigation measures in controlling water pollution and good site management, as specified in the ProPECC PN 1/94 "Construction Site Drainage" are followed, where applicable, to prevent runoff with high level of SS from entering the surrounding waters.</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works. Channels, earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities.</li> </ul>  | Obs.                               |
|          |                  | <ul style="list-style-type: none"> <li>Diversion of natural stormwater should be provided as far as possible. The temporary on-site drainage system should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff.</li> </ul>  | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Sedimentation tanks with sufficient capacity, constructed from preformed individual cells of approximately 6 to 8 m<sup>3</sup> capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal.</li> </ul>  | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped.</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. The silt/sediment traps should be incorporated in the permanent drainage channels to enhance deposition rates.</li> </ul> | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.</li> </ul>                                 | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>All open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.</li> </ul>  | Obs.                               |

| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|-----------|------------------|---|------------------------------------|
|           |                  | <ul style="list-style-type: none"> <li>• Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94.</li> </ul>  | N/A                                |
|           |                  | <ul style="list-style-type: none"> <li>• All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction site exit where practicable. Washwater should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.</li> </ul> | Obs.                               |
|           |                  | <ul style="list-style-type: none"> <li>• Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.</li> </ul>  | Yes                                |
|           |                  | <ul style="list-style-type: none"> <li>• Appropriate numbers of chemical toilets are provided by a licensed contractor to serve the construction workers over the construction sites to prevent direct disposal of sewage into the water environment. No onsite discharge from these chemical toilets is allowed.</li> </ul>  | Yes                                |
|           |                  | <ul style="list-style-type: none"> <li>• All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. The contractors shall ensure that leakages or spillages are contained and cleaned up immediately.</li> </ul>   | N/A                                |
| S5.12.1.1 | S5.7.7           | <ul style="list-style-type: none"> <li>• During the marine construction period, impact monitoring should be undertaken 3 days per week, at mid-flood and mid-ebb tides, with sampling/measurement at all designated monitoring stations including control station</li> </ul>  | Marine works not commenced yet     |

#### Recommended Mitigation Measures for Waste Management

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|----------|------------------|--|------------------------------------|
| S6.5.1.2 | S6.2             | <p><b>Good Site Practices:</b></p> <ul style="list-style-type: none"> <li>• Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility. Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures.</li> </ul> | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>• Provision of sufficient waste reception/ disposal points, and regular collection of waste.</li> </ul>   | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>• Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>• Regular cleaning and maintenance programme for drainage systems and sumps.</li> </ul>   | Yes                                |

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|----------|------------------|--|------------------------------------|
|          |                  | <ul style="list-style-type: none"> <li>Provision of wheel washing facilities at site exit before the trucks leave the works areas to minimize dust disturbance due to the trucks transportation to the public road network</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).</li> </ul>  | Yes                                |
|          |                  | <p><b>Waste Reduction Measures:</b></p> <ul style="list-style-type: none"> <li>Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>Proper storage and good site practices to minimize the potential contamination of construction materials.</li> <li>Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste.</li> <li>Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.</li> </ul>   | Yes                                |
|          |                  | <p><b>Storage, Collection and Transportation of Waste:</b></p> <ul style="list-style-type: none"> <li>Non-inert C&amp;D materials such as top soil should be handled and stored well to ensure secure containment of the materials.</li> <li>Stockpiling area/ temporary stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away.</li> </ul>   | Yes                                |
| S6.5.1.3 | S6.2             | <ul style="list-style-type: none"> <li>Different locations should be designated to stockpile each material to enhance reuse.</li> <li>Remove waste in timely manner.</li> <li>Employ the trucks with cover or enclosed containers for waste transportation.</li> <li>Obtain relevant waste disposal permits from the appropriate authorities.</li> <li>Disposal of waste should be done at licensed waste disposal facilities.</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Trip-ticket system should be established in accordance with the Development Bureau Technical Circular (Works) (DEVB TC(W)) No. 6/2010 "Trip Ticket System for Disposal of Construction &amp; Demolition Materials". A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should be installed at the vehicular entrance and exit of the site as additional measures to prevent fly-tipping. in order to monitor the management of C&amp;D materials and disposal solid wastes at public filling facilities and landfills, and control fly-tipping.</li> </ul> | Yes                                |
|          |                  | <p><b>C&amp;D Material:</b></p> <ul style="list-style-type: none"> <li>Carry out on-site sorting.</li> </ul>   | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Storage areas should be located within the site during construction phase for temporary storage of inert C&amp;D materials.</li> </ul>  | Yes                                |

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|----------|------------------|---|------------------------------------|
|          |                  | <ul style="list-style-type: none"> <li>All C&amp;D materials arising from the construction would be sorted on-site to recover the inert C&amp;D materials and reusable and recyclable materials prior to disposal off-site as far as practicable. Non-inert portion of C&amp;D materials should also be reused whenever possible and be disposal of at landfills as a last resort.</li> </ul>   | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>The Contractor would be responsible for on-site sorting of C&amp;D materials and promptly remove all sorted and processed material arising from the construction activities to minimize temporary stockpiling on-site.</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Reuse suitable inert C&amp;D materials on-site as far as practicable.</li> </ul>   | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Reuse suitable excavated rock by reworking at approved quarries (e.g. Crushed as aggregates).</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Sorting of demolition debris and excavated materials from demolition works to recover reusable/ recyclable portions (e.g. Soil, broken concrete, metal).</li> </ul>  | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Protect recyclable material to keep it in usable condition.</li> </ul>   | N/A                                |
| S6.5.1.7 | EP 2.16          | <ul style="list-style-type: none"> <li>All dump trucks for C&amp;D material transportation and disposal shall be equipped with Global Positioning System (GPS) or equivalent automatic identification system (AIS) for real time tracking and monitoring of their travel routings and parking locations in order to avoid illegal dumping or landfilling of C&amp;D materials. The data collected by GPS or equivalent AIS relating to travel routings and parking locations of all dump trucks shall be recorded properly for checking and auditing by ET and IEC respectively.</li> </ul>           | Yes                                |
|          |                  | <p><u>Land-based and Marine-based Excavated Sediment:</u><br/> <b>Mitigation measures for treating excavated sediment</b></p> <ul style="list-style-type: none"> <li>Excavated marine sediment should be reused as far as possible within the Project Site before considering disposal. Subject to availability of suitable location and review on the backfilling method, part or all of the marine sediment would be reused on site. Possible methods for the reuse of marine sediment on site including the reuse as backfilling materials after mixing with cement should be explored.</li> </ul> | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Cement mixing process should be enclosed to minimize odour/ dust emissions.</li> </ul>   | N/A                                |
| S6.5.1   | S6.2             | <ul style="list-style-type: none"> <li>Loading, unloading, handling, transferring and storing for treated and untreated sediment should be carried out in a good site practices that prevents or minimizes dust emissions.</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>An impermeable surfacing shall be placed under the mixing areas and a cover should be employed to prevent dust emission and possible cross contamination.</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Good housekeeping should be maintained at the mixing and treatment area.</li> </ul>  | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Treated and untreated sediment should be clearly separated and stored separately.</li> </ul>   | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Surface runoff from the mixing and treatment area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.</li> </ul>   | N/A                                |

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|----------|------------------|--|--|
|          |                  | <ul style="list-style-type: none"> <li>• Prior to the cement mixing operation, safety training and environmental training should be provided to all related site staff and workers.</li> </ul>   | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• All workers in site area should wear appropriate personal protective equipment, such as safety helmet, safety shoes, gloves, goggles and protective coveralls (if necessary). No person should approach to the backhoe / excavator during their operation.</li> </ul>   | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• Workers, vehicles, instruments, and equipment in touch with the marine sediment will be properly decontaminated by cleaned with non-phosphate detergent and rinsed with distilled water between each excavation and sampling event and before leaving the site.</li> </ul>  | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• The excavated area should be vacated and fenced off and adequate warning signs should be displayed.</li> </ul>  | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• Excavation works should be done within short period of time. No excavation should be held during the rainy days to avoid the migration of contaminants on site.</li> </ul>  | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• Smoking, eating or drinking during activities with exposure to the contaminated materials should be prohibited.</li> </ul>  | N/A                                      |
|          |                  | <p><b>Marine Sediment Handling</b></p> <ul style="list-style-type: none"> <li>• Marine disposal option for the marine sediment should only be considered as the last resort upon exhaustion of reuse options.</li> </ul>   | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• All construction plant and equipment shall be designed and maintained to minimise the risk of sediments being released into the water column or deposited in the locations other than designated location.</li> </ul>   | No marine disposal planned at this stage |
|          |                  | <ul style="list-style-type: none"> <li>• All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to minimise that undue turbidity is not generated by turbulence from vessel movement or propeller wash.</li> </ul>  | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.</li> </ul>   | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• All marine sediments shall be transported to the designated location by water-tight containers and dump trucks with tarpaulin cover.</li> </ul>   | N/A                                      |
|          |                  | <ul style="list-style-type: none"> <li>• The requirements and procedures for dredged/excavated sediment specified under the PNAP ADV-21 should be followed. The Contractor must ensure that all the necessary waste disposal and marine dumping permits or licences are obtained prior to the commencement of the construction works.</li> </ul>   | No marine disposal planned at this stage |
|          |                  | <ul style="list-style-type: none"> <li>• All dumping vessels have to be approved in a marine dumping permit issued under the DASO. Each of the vessels has to be installed with an automatic recording equipment, namely the Front End Mobile Unit (FEMU), which is a key component of the Real Time Tracking &amp; Monitoring of Vessel (RTTMV) System of EPD. The FEMU transmits self-monitoring data direct from the barge at sea to the Control Centre at EPD through GPRS mobile communication network. The transportation route avoiding the ecological sensitive areas shall be proposed when applying the dumping permit.</li> </ul> | No marine disposal planned at this stage |

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|--|------------------|---|------------------------------------|
| S6.5.1.14 and 6.5.1.15   | S6.2             | <b>Chemical Waste:</b>  |                                    |
|  |                  | <ul style="list-style-type: none"> <li>The Contractor shall register as Chemical Waste Producers with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The containers used for storing chemical waste should be suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The containers should have a capacity of &lt;450L unless the specifications have been approved by the EPD.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The label on the containers should be clearly labelled in English and Chinese and comply with the requirements prescribed in Schedule 2 of Waste Disposal (Chemical Waste) (General) Regulation.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The storage area for the chemical waste should be used solely for the storage of chemical wastes.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The storage area should be enclosed on at least three sides by a wall, partition or fence with a height of not less than two metres or the total height of containers in stack, whichever is less.</li> </ul>  | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>Where containers of liquid chemical wastes are stored, the area should be designed with impermeable floor and provided with a bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest.</li> </ul> | Not Obs.                           |
|  |                  | <ul style="list-style-type: none"> <li>Adequate ventilation should be allowed in the storage area by leaving some space between the top of the enclosure walls and the ceiling, or provision of louvers on the sides of the enclosure walls.</li> </ul>   | Yes                                |
|  |                  | <ul style="list-style-type: none"> <li>The storage area should be sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).</li> </ul>  | Yes                                |
| <ul style="list-style-type: none"> <li>Separate containers should be used for packing different types of waste or waste arising from different sources and process to minimise mixing of incompatible materials.</li> </ul>  | Yes              |   |                                    |
| <ul style="list-style-type: none"> <li>Drip tray should be provided to chemical waste containers. The drip tray should be clean up regularly. Clean up should be done before foreseeable inclement weather such as typhoon or heavy rain.</li> </ul>                                       | Obs.             |   |                                    |
| <ul style="list-style-type: none"> <li>Waste oils, chemicals or solvents shall not be disposed of to drain.</li> </ul>   | Yes              |   |                                    |
| S6.5.1.16 and 6.5.1.17   | S6.2             | <b>General Refuse:</b>  |                                    |
|  |                  | <ul style="list-style-type: none"> <li>General refuse should be stored in enclosed bins or compaction units separately from C&amp;D materials/ wastes and chemical wastes. Sufficient bins shall be provided for storage of general refuse as required under the Public Cleansing and Prevention of Nuisances Regulation.</li> </ul>            | Yes                                |
| <ul style="list-style-type: none"> <li>Recycling bins should also be placed to encourage recycling. Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.</li> </ul> | Yes              |   |                                    |

| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|-----------|------------------|--|------------------------------------|
|           |                  | <ul style="list-style-type: none"> <li>A reputable waste collector should be employed to remove general refuse on a regular basis and shall be disposed of to the nearest landfill or refuse transfer station. Burning of refuse on construction sites is prohibited. Disposal of general refuse is recommended before foreseeable inclement weather such as typhoon or heavy rain.</li> </ul>                             | Yes                                |
|           |                  | <ul style="list-style-type: none"> <li>Segregation and storage of different types of waste should be promoted to facilitate the reuse and recycling of the materials. Separately labelled bins for the deposition of aluminum cans, paper and plastic bottles etc. should be provided as far as practicable. Arrangements should be made with the recycling companies to collect the recycle waste as required.</li> </ul> | Yes                                |
| S6.5.1.18 | S6.2             | <p><b>Floating Refuse:</b></p> <ul style="list-style-type: none"> <li>Tool-box training shall be provided to site workers to ensure proper site waste management and good site practice are implemented.</li> </ul>  | Yes                                |
|           |                  | <ul style="list-style-type: none"> <li>Weekly inspection shall also be carried out to ensure no floating refuse is found within the Project Area.</li> </ul>   | Yes                                |
|           |                  | <ul style="list-style-type: none"> <li>If any floating refuse is accidentally trapped in the marine waters within the Project Area, it will be collected by the Contractor and recycled as far as possible, the remaining waste will be disposed of as general refuse.</li> </ul>  | Not Obs.                           |

**Recommended Mitigation Measures for Ecological Impact**

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|----------|------------------|---|------------------------------------|
|          |                  | <b>Measures for Indirect Disturbances to Surrounding Habitats and Associated Wildlife</b>   |                                    |
|          |                  | <ul style="list-style-type: none"> <li>The boundary of the Project site shall be clearly marked by temporary fence. The works area boundaries shall be regularly checked to ensure that they are not breached and that no damage occurs to surrounding habitat.</li> </ul>  | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Construction activities shall be carried out in daytime hours, as much as appropriate.</li> </ul>  | Yes                                |
| S7.9.1.2 | S7.2             | <ul style="list-style-type: none"> <li>Adopt appropriate measures including controlled wastewater discharge to the nearby water bodies, in accordance with the guidelines stipulated in Environmental Protection Department (EPD)'s Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN1/94) during the construction works to properly control site run-off and drainage and to minimise potential water quality impacts.</li> </ul> | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces within the works area should be covered by tarpaulin or by other means.</li> </ul>  | N/A                                |
|          |                  | <ul style="list-style-type: none"> <li>Avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats.</li> </ul>   | Yes                                |
|          |                  | <ul style="list-style-type: none"> <li>Prohibit and prevent open fires within the works area boundary during construction and provide temporary firefighting equipment in the work areas.</li> </ul>  | N/A                                |

| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
|---|------------------|--|------------------------------------|
|   |                  | <ul style="list-style-type: none"> <li>In view of Scenic hill supporting the remnant population of Romer's Tree Frog in Chek Lap Kok, introducing invasive species (i.e. Greenhouse Frog) which may pose potential negative impacts to the native species, should be avoided. Screening for Greenhouse Frog, including adults and eggs, in soil and landscape materials should be carried out before being used for backfilling/ landscaping purpose.</li> </ul> | N/A                                |
| <b>Measures for Marine Ecological Resources</b>                     |                  |  |                                    |
| S7.3.2  | S7.2             | <ul style="list-style-type: none"> <li>Speed restriction of 10 knots for all vessels used during the construction and operation of the Project.</li> </ul>   | N/A                                |
| S7.9.1.1  | EP 2.15          | <ul style="list-style-type: none"> <li>No underwater percussive piling shall be conducted under this Project.</li> </ul>   | N/A                                |
| <b>Recommended Mitigation Measures for Fisheries Impact</b>         |                  |  |                                    |
| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
| S8.10.1   | S5.2             | <ul style="list-style-type: none"> <li>Appropriate notification, communications, site protection and marking would be adopted to reduce navigation risks with fishing vessels.</li> </ul>  | Not Obs.                           |
| <b>Recommended Mitigation Measures for Cultural Heritage Impact</b> |                  |  |                                    |
| EIA Ref.  | EM&A Manual Ref. | Recommended Mitigation Measures  | Mitigation Measures Implemented? ^ |
| S9.6.1.3  | S9.2.3           | <ul style="list-style-type: none"> <li>As a precautionary measure, the project proponent and his/her contractor are required to inform AMO immediately when any antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered during the seabed disturbance works in the ATCL Site</li> </ul>   | N/A                                |

**Recommended Mitigation Measures for Landscape and Visual Impact**

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? <sup>^</sup> |
|----------|------------------|---|---|
| S10.9.2  | S10.2            | <p><b>CM1 - Preservation of Existing Trees and Other Vegetation</b></p> <ul style="list-style-type: none"> <li>All the existing Trees to be retained and not to be affected by the Project should be carefully protected during the construction phase in accordance with DEVB TCW No. 4/2020 – titled “Tree Preservation” and the latest “Guidelines on Tree Preservation during Development” issued by GLTM Section of DEVB, including provision of Tree Protection Zones (TPZs). Any existing vegetation in landscaped areas and natural terrain not to be affected by the Project should also be carefully preserved. Therefore, these existing landscape elements can maintain their qualities throughout the construction phase.</li> </ul> | Yes   |
|          |                  | <p><b>CM2 - Transplanting of Affected Trees</b></p> <ul style="list-style-type: none"> <li>Trees unavoidably affected by the works should be transplanted where practical. The requirement shall follow the “Guidelines on Tree Transplanting” released by GLTM Section of DEVB.</li> </ul>   | No transplantation planned for this Project   |
|          |                  | <p><b>CM3 - Compensatory Tree Planting</b></p> <ul style="list-style-type: none"> <li>Compensatory tree planting should be provided to compensate for felled trees during construction according to DEVB TCW No. 4/2020 – titled “Tree Preservation” and satisfaction of relevant Government departments. Sufficient planting area shall be provided for the growth of trees. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application.</li> </ul>  | N/A   |
|          |                  | <p><b>CM4 - Control of Night-time Lighting Glare</b></p> <ul style="list-style-type: none"> <li>Lighting for the construction works at night, if any, should be carefully controlled to prevent light overspill to the nearby VSRs and into the sky.</li> </ul>   | Yes   |
|          |                  | <p><b>CM5 - Erection of Decorative Screen Hoardings</b></p> <ul style="list-style-type: none"> <li>Decorative Hoardings, with designs and forms compatible with the surrounding settings, should be erected during the construction phase to minimise the potential landscape and visual impacts from the construction works and activities, e.g. avoiding unintended destruction of existing trees and other landscape elements, and reducing visual bulkiness of the screen hoardings, etc.</li> </ul>  | Yes   |
|          |                  | <p><b>CM6 - Management of Construction Activities and Facilities</b></p> <ul style="list-style-type: none"> <li>The layout and arrangement of construction site facilities which include site office and temporary storage area should be properly managed and construction activities at the site should be carefully supervised and controlled to minimise potential adverse landscape and visual impacts.</li> </ul>   | Yes   |
|          |                  | <p><b>CM7 - Reinstatement of Temporarily Disturbed Landscape Areas</b></p> <ul style="list-style-type: none"> <li>All hard and soft landscape areas disturbed temporarily during construction shall be reinstated on like-to-like basis, to the satisfaction of the relevant Government Departments.</li> </ul>   | N/A   |

**Others**

| EIA Ref. | EM&A Manual Ref. | Recommended Mitigation Measures   | Mitigation Measures Implemented? ^ |
|----------|------------------|---|------------------------------------|
| -        | -                | <ul style="list-style-type: none"> <li>• A copy of the valid Environmental Permit shall be displayed conspicuously on the Project site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The most updated information about the Permit, including any amended Permit, shall be displayed at such locations.</li> <li>• If the Permit Holder surrenders a part or whole of the Permit, the notice he send to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).</li> </ul> | Obs.                               |
| -        | -                | <ul style="list-style-type: none"> <li>• The required licences should be obtained by the Contractor (including CNP (if any), WPCO licence, etc.</li> </ul>  | Yes                                |
| -        | -                | <ul style="list-style-type: none"> <li>• Display the copy of CNP (if any) at all site entrance/exits for public's information.</li> </ul>   | N/A                                |

Notes:

Yes = Implemented where applicable

Obs./Rem = Observations or reminders were issued, and items were rectified

Not Obs. = Not observed in the site inspection during the reporting period

N/A = Not applicable to the construction works implemented during the reporting period

^ = Checked by ET through site inspection and record provided by the Contractor