**Specific Site Activities**

Please tick each item as ‘Yes’, ‘No’ or ‘N/A or not obs’ as appropriate.

| **\*EIA / ^EM&A / #EP ref:** | **Item** | **Close-out on last comments (Y/N)** | **Yes** | **No** | **N/A or**  **not obs** |  | **Remarks** |
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|  | ***Air Quality – Construction Phase*** |  |  |  |  |  |  |
| \*5.2.6.5, ^2.1 | **Best Practices for Concrete Batching Plant** |  |  |  |  |  |  |
| The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants, including: |  |  |  |  |  |  |
|  | * **Cement and other dusty materials:** Loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. Where a totally enclosed system is not provided, every stock of more than 20 bags of cement or dry PFA shall be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides. |  |  |  |  |  |  |
|  | * **Other raw materials:** Loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions shall be carried out in such a manner to prevent or minimize dust emissions. All receiving hoppers for unloading relevant materials, the belt conveyor for handling materials, all conveyor transfer points and aggregates (regardless of size) shall be stored in totally enclosed structures as described in the Implementation Schedule. |  |  |  |  |  |  |
|  | * **Loading of materials for batching:** Concrete truck shall be loaded in such a way as to minimize airborne dust emissions. Pre-mixing of materials shall be conducted in totally enclosed structures as described in the Implementation Schedule. Effective dust control measures acceptable to EPD shall be adopted. |  |  |  |  |  |  |
| \*5.2.6.6, ^2.1 | **Best Practices for Asphaltic Concrete Plant** |  |  |  |  |  |  |
| The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted, including: |  |  |  |  |  |  |
|  | * **Cold feed side:** Aggregates (whether with a nominal size less than / equal to or greater than 5mm) shall be stored in totally enclosed structures as described in the Implementation Schedule. All belt conveyors, conveyor transfer points and transferring of materials returned from dust collection system shall be enclosed. |  |  |  |  |  |  |
|  | * **Hot feed side:** The inlet and outlet of the rotary dryer, bucket elevator, vibratory screens and hot bins shall be enclosed. |  |  |  |  |  |  |
|  | * **Loading, unloading, handling, transfer or storage of other raw materials** which may generate airborne dust emissions shall be carried out in such a manner to prevent or minimize dust emissions. |  |  |  |  |  |  |
| \*5.2.6.7, ^2.1 | **Best Practices for Rock Crushing Plants** |  |  |  |  |  |  |
| The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted, including: |  |  |  |  |  |  |
|  | * **Crushers:** The outlet of all primary crushers, both inlet and outlet of all secondary and tertiary crushers and the inlet hopper of the primary crushers shall be enclosed as described in the Implementation Schedule. Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers. |  |  |  |  |  |  |
|  | * **Vibratory screens and grizzlies:** All vibratory screens, screenhouses and grizzlies shall be totally enclosed as described in the Implementation Schedule. |  |  |  |  |  |  |
|  | * **Belt conveyors:** All conveyors including transfer points shall be enclosed as described in the Implementation Schedule. |  |  |  |  |  |  |
|  | * **Storage piles and bins:** Free falling transfer points from conveyors to stockpiles and stockpiles of aggregates 5 mm in size or less shall be enclosed as described in the Implementation Schedule. |  |  |  |  |  |  |
|  | * **Rock drilling equipment:** Appropriate dust control equipment such as a dust extraction and collection system shall be used. |  |  |  |  |  |  |

**Specific Site Activities**

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|  | ***Water Quality – Construction Phase*** |  |  |  |  |  |  |
| \*8.8.1.2-8.8.1.3; ^5.1; #2.9, 2.11, 2.15, 2.26; SRP 4.2; WMP 4.4.2; MTRMPs  (Also \*10.5.1.18, ^7.1, #2.9 for Type 1 sediment) | **Marine Construction Activities** |  |  |  |  |  |  |
| General Measures to be Applied to All Works Areas |  |  |  |  |  |  |
| The following measures shall be applied to all construction vessels involving transport of materials that may give rise to unexpected release of large amounts of suspended solids: |  |  |  |  |  |  |
| * Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; |  |  |  |  |  |  |
| * Vessels shall be regularly inspected to ensure no leakages and any leakages shall be repaired quickly prior to mobilisation of the vessels; |  |  |  |  |  |  |
| * Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; |  |  |  |  |  |  |
| * Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation; |  |  |  |  |  |  |
|  | * Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; |  |  |  |  |  |  |
|  | * Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; |  |  |  |  |  |  |
|  | * Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; |  |  |  |  |  |  |
|  | * Use of Lean Material Overboard (LMOB) systems shall be prohibited; |  |  |  |  |  |  |
|  | * Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; |  |  |  |  |  |  |
|  | * All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; |  |  |  |  |  |  |
|  | * The 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; and |  |  |  |  |  |  |
|  | * For ground improvement activities including Deep Cement Mixing (DCM), the wash water from cleaning of the drilling shaft should be appropriately treated before discharge.  The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge.  No direct discharge of contaminated water is permitted. |  |  |  |  |  |  |
|  | Specific Measures to be Applied to All Works Areas |  |  |  |  |  |  |
| #2.26(i) | * A maximum of 10 % fines content shall be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall. |  |  |  |  |  |  |
| #2.26(ii) | * An advance seawall of at least 200m shall be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities. |  |  |  |  |  |  |
|  | Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works |  |  |  |  |  |  |
|  | * Double layer ‘Type III’ silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise suspended solid (SS) release during ebb tides. |  |  |  |  |  |  |
|  | * Double layer silt curtains to enclose water sensitive receivers (WSRs) C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and |  |  |  |  |  |  |
|  | * The silt curtains and silt screens should be regularly checked and maintained. |  |  |  |  |  |  |
|  | Specific Measures to be Applied to Land Formation Activities during Marine Filling Works |  |  |  |  |  |  |
|  | * Double layer ‘Type II’ or ‘Type III’ silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides; |  |  |  |  |  |  |
|  | * Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; |  |  |  |  |  |  |
|  | * Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and |  |  |  |  |  |  |
|  | * The silt curtains and silt screens should be regularly checked and maintained. |  |  |  |  |  |  |
|  | Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion |  |  |  |  |  |  |
| #2.26(iii) | * Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping and Sea Ordinance (DASO) permit conditions; and |  |  |  |  |  |  |
| #2.26(iv) | * Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure |  |  |  |  |  |  |
| \*8.8.1.6 & 8.8.1.7; ^5.1; #2.15, 2.27, 2.29 | **Piling Activities for Construction of New Runway Approach Lights and Hong Kong International Airport Approach Area (HKIAAA) Marker Beacons** |  |  |  |  |  |  |
| Silt curtains shall be deployed around the piling activities to completely enclose the piling works and associated works in accordance with the Silt Curtain Deployment Plan. Care should be taken to avoid spillage of excavated materials into the surrounding marine environment. |  |  |  |  |  |  |
|  | For construction of the eastern approach lights at the Contaminated Mud Pits (CMPs) |  |  |  |  |  |  |
|  | * Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; |  |  |  |  |  |  |
|  | * Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; |  |  |  |  |  |  |
|  | * The excavated materials shall be removed using a closed grab within the steel casings; |  |  |  |  |  |  |
|  | * No discharge of the cement mixed materials into the marine environment will be allowed; and |  |  |  |  |  |  |
|  | * Excavated materials shall be treated and reused on-site. |  |  |  |  |  |  |
| \*8.8.1.12 & 8.8.1.13; ^5.1; #2.28, 2.30 | **Drilling Activities for the Submarine Aviation Fuel Pipelines** |  |  |  |  |  |  |
| To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: |  |  |  |  |  |  |
| * A ‘zero-discharge’ policy shall be applied for all activities to be conducted at Sha Chau and its surrounding waters; |  |  |  |  |  |  |
|  | * No bulk storage of chemicals shall be permitted; and |  |  |  |  |  |  |
|  | * A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. |  |  |  |  |  |  |
|  | At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: |  |  |  |  |  |  |
|  | * During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge. |  |  |  |  |  |  |
|  | * Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. |  |  |  |  |  |  |

**Specific Site Activities**

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|  | ***Waste Management Implications – Construction Phase*** |  |  |  |  |  |  |
| \*10.5.1.16, ^7.1; WMP 4.4.1 | The following mitigation measures are recommended during excavation and treatment of the sediments: |  |  |  |  |  |  |
| * On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; |  |  |  |  |  |  |
|  | * The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; |  |  |  |  |  |  |
|  | * All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; |  |  |  |  |  |  |
|  | * Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; |  |  |  |  |  |  |
|  | * Treated and untreated sediment should be clearly separated and stored separately; |  |  |  |  |  |  |
|  | * Surface runoff from the enclosed 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. |  |  |  |  |  |  |

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|  | ***Land Contamination – Construction Phase*** |  |  |  |  |  |  |
| \*11.8.1.2, ^8.1 | If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): |  |  |  |  |  |  |
|  | * To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; |  |  |  |  |  |  |
|  | * Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; |  |  |  |  |  |  |
|  | * Stockpiling of contaminated excavated materials on site should be avoided as far as possible; |  |  |  |  |  |  |
|  | * The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; |  |  |  |  |  |  |
|  | * Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; |  |  |  |  |  |  |
|  | * Truck bodies and tailgates should be sealed to prevent any discharge; |  |  |  |  |  |  |
|  | * Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; |  |  |  |  |  |  |
|  | * Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; |  |  |  |  |  |  |
|  | * Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and |  |  |  |  |  |  |
|  | * Maintain records of waste generation and disposal quantities and disposal arrangements. |  |  |  |  |  |  |

**Specific Site Activities**

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|  | ***Terrestrial Ecological Impact – Construction Phase*** |  |  |  |  |  |  |
| \*12.7.2.3 & 12.7.2.6; ^9.1; #2.30 | **Avoidance and Minimisation of Direct Impact to Egretry** |  |  |  |  |  |  |
| * The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry. * In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island. |  |  |  |  |  |  |
| \*12.7.2.5, ^9.1 | **Preservation of Nesting Vegetation** |  |  |  |  |  |  |
| * The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved. |  |  |  |  |  |  |
| \*12.7.2.4, ^9.1, #2.30 | **Timing of Pipe Connection Works outside Ardeid’s Breeding Season** |  |  |  |  |  |  |
| * All horizontal directional drilling (HDD) and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids’ breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. |  |  |  |  |  |  |

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|  | ***Marine Ecological / Fisheries Impact – Construction Phase*** |  |  |  |  |  |  |
| \*13.11.5.14-13.11.5.18, ^10.3.1 | **Dolphin Exclusion Zone** |  |  |  |  |  |  |
| Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas. |  |  |  |  |  |  |
|  | * A DEZ should also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction. |  |  |  |  |  |  |
|  | * A DEZ should also be implemented during bored piling work but as a precautionary measure only. |  |  |  |  |  |  |