

## Summary of EMIS

### Power Station – (Part B of EIA Report)

#### Construction Phase Mitigation Measures and their Implementation

| EM&A Log Ref. | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Implementation Status    |
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|               | <b>AIR QUALITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |
| A1            | For general construction works, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as: <ul style="list-style-type: none"> <li>the haul roads shall be sprayed with water to keep the entire road surface wet.</li> <li>the load carried by vehicle shall be covered by impervious sheeting to ensure no leakage of dusty materials from the vehicle.</li> <li>the heights from which fill materials are dropped shall be controlled to a practical level to minimise the fugitive dust arising from unloading.</li> </ul> | C<br>C<br>N/A            |
| A2            | For the concrete batching plant, the following control measures are recommended: <ul style="list-style-type: none"> <li>loading, unloading, handling, transfer or storage of any dusty materials shall be carried out in a totally enclosed system.</li> <li>The materials which may generate airborne dust emissions shall be wetted by water spray system.</li> <li>All receiving hoppers shall be enclosed on three sides up to 3m above unloading point.</li> <li>All conveyor transfer points shall be totally enclosed.</li> </ul>                                                                | N/A<br>N/A<br>N/A<br>N/A |
|               | <b>WATER QUALITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |
| B1            | Silt curtains shall be installed on the eastern, southern and north western sides of the reclamation site during dredging for the reclamation construction. This is a required mitigation measure for the construction works and shall be implemented prior to the commencement of bulk dredging. **                                                                                                                                                                                                                                                                                                    | N/A                      |
| B3            | As a necessary operational constraint combined bulk dredging and sand filling for site formation shall not be permitted at any time. In addition, sand filling for site platform shall take place behind constructed sea walls which pierce the water surface. **                                                                                                                                                                                                                                                                                                                                       | N/A                      |
| B4            | HEC shall ensure design to divert all storm drains away from Hung Shing Ye Bay. **                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N/A                      |
| B5            | Sand fill for the rubble mound seawalls shall be placed by controlled pumping down the trailer arm. **                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N/A                      |
| B6            | EM&A shall confirm the acceptability of any impacts during construction and should any unacceptable impacts be found then one or more of the following mitigation measures shall be implemented: ** <ul style="list-style-type: none"> <li>reducing the number of dredgers working at any one time;</li> <li>reducing the rate of working of the dredgers;</li> <li>temporary suspension of operations;</li> <li>phasing of the works so that dredging / filling is only undertaken at certain stages of the tidal cycle.</li> </ul>                                                                    | N/A                      |

| EM&A Log Ref. | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Implementation Status                    |
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| B7            | <p>In addition to the above specific measures the following general working procedures shall be adopted. **</p> <ul style="list-style-type: none"> <li>• fully-enclosed or watertight grabs shall be used to minimise loss of sediment during the raising of loaded grabs through the water column;</li> <li>• the descent speed of grabs shall be controlled to minimise the seabed impact speed and to reduce the volume of over dredging;</li> <li>• barges shall be loaded carefully to avoid splashing of material;</li> <li>• all barges used for the transport of dredged materials shall be fitted with tight bottom seals in order to prevent leakage of material during loading and transport;</li> <li>• all barges shall be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action;</li> <li>• the speed of trailer dredgers shall be controlled to prevent propeller wash from stirring up the sea bed sediments;</li> <li>• "rainbowing" sand fill from trailer dredgers shall not be permitted; and</li> <li>• the works shall cause no visible foam, oil, grease or litter or other objectionable matter to be present in the water within and adjacent to the dredging site and along the route to the disposal site.</li> </ul> | <br><br><br><br><br><br><br><br><br><br> |
| B8            | <p>Cumulative impacts shall be assessed through EM&amp;A. Co-ordination with the EM&amp;A consultants for other projects to determine if any exceedances are caused by the other projects or by HEC's activities. Should monitoring results indicate exceedances at sensitive receivers due to HEC's activities, then the above described mitigation measures shall be implemented until impacts reduce to acceptable levels. **</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                      |
|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          |
|               | <b>NOISE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |
| C1            | General noise mitigation measures shall be employed at all work sites throughout the construction phase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | C                                        |
| C2            | Mitigate against general construction noise during Sunday's and public holidays, either at source with portable noise barriers, or by rescheduling of some PME's to less sensitive time periods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                      |
| C3            | Mitigate against night time noise from dredging equipment, with silencers or mufflers. **                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N/A                                      |
|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          |
|               | <b>LANDSCAPE &amp; VISUAL IMPACTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |
| D1            | <p>The following mitigation measures shall be allowed for landscape and visual improvement:</p> <ul style="list-style-type: none"> <li>• Use rubble mound seawall along south and west edges of the reclamation to provide a more natural look.</li> <li>• Break the mass of main buildings by varying the height/division into smaller units.</li> <li>• Plant trees and vegetation for screening.</li> <li>• Adopt colour scheme to blend the buildings into the scenery.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <br><br><br><br>                         |

| EM&A Log Ref.                                     | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Implementation Status |
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| <b>WASTE MANAGEMENT</b>                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
| E1                                                | HEC to submit a Waste Management Plan for the construction phase to EPD. The Plan shall be verified by the IEC and shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall take into account the recommendations of the EIA report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | C                     |
| <i>Dredging Waste</i>                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
| E2                                                | All vessels for marine transportation of dredged sediment shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials. In addition, loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water, and barges or hoppers should under no circumstances be filled to a level which shall cause the overflowing of materials or polluted water during loading or transportation**                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | N/A                   |
| <i>Storage, Collection and Transport of Waste</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
| E3                                                | <ul style="list-style-type: none"> <li>• Minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.</li> <li>• Obtain the necessary waste disposal permits from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance (Cap.354), Waste Disposal (Chemical Waste) (General) Regulation (Cap.354), the Crown Land Ordinance (Cap 28), Dumping at Sea Ordinance (Cap 466) and Work Branch Technical Circular No. 22/92, Marine Disposal of Dredged Mud.</li> <li>• Disposal of waste at Licensed sites;</li> <li>• Develop procedures such as a ticketing system to facilitate tracking of marine mud and chemical waste, and to ensure that illegal disposal does not occur;</li> <li>• Segregate and sort the waste materials into 3 categories:               <ul style="list-style-type: none"> <li>• public fill (e.g. concrete and rubble) for re-use on-site or disposal at a public filling area;</li> <li>• re-use and/or recycling waste (e.g. steel and other metals);</li> <li>• waste which cannot be re-used and/or recycled (e.g. wood, glass and plastic) for landfill disposal.</li> <li>• The sorting process shall be carefully monitored to avoid missing of the 3 categories. Different types of wastes shall be stockpiled and stored in different containers or skips to enhance re-use or recycling of materials and their proper disposal.</li> </ul> </li> <li>• Maintain records of the quantities of wastes generated and disposed off-site for each category of waste.</li> </ul> | C                     |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | C                     |
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| E4                                                | Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N/A                   |
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| <b>LAND CONTAMINATION</b>                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
| F1                                                | No land Contamination mitigation measures are required during the construction phase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                   |
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| <b>MARINE ECOLOGY</b>                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |

| <b>EM&amp;A Log Ref.</b> | <b>Mitigation Measures</b>                                                                                                                                                                                                                        | <b>Implementation Status</b> |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| G1                       | All percussive piling works shall be conducted on reclaimed land to avoid noise impact to marine mammals**                                                                                                                                        | N/A                          |
| G2                       | All construction related vessels shall approach the extension site from the north and via the East Lamma Channel to avoid disturbance to the finless porpoise**                                                                                   | N/A                          |
| G3                       | Rubble mound seawall to the south and west edges of the reclamation to enhance recolonisation of marine organisms**                                                                                                                               | N/A                          |
| G4                       | Artificial Reefs of a volume not less than 400 m <sup>3</sup> shall be deployed in a location to be decided upon consultation with the Director of Agriculture and Fisheries to serve the purpose of an Additional Habitat Enhancement Measure.** | N/A                          |
| <b>FISHERIES</b>         |                                                                                                                                                                                                                                                   |                              |
| H1                       | No Fisheries-specific mitigation measures are required during the construction phase.                                                                                                                                                             | N/A                          |
| <b>RISK ASSESSMENT</b>   |                                                                                                                                                                                                                                                   |                              |
| I1                       | No risk mitigation measures are required during the construction phase.                                                                                                                                                                           | N/A                          |

## Remarks:

- \*\* - No dredging and reclamation work would be involved for L11 & L12 construction
- C - Compliance with mitigation measure
- NC - Non-compliance with mitigation measure
- N/A - Not Applicable