
**APPENDIX F
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)**

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main Concerns to address	Implementation Agent	Location / Duration of the measure	Implementation Stages ¹			Relevant Legislation & Guidelines	Implementation Status
						Des	C	O		
Air Quality Impact Construction Phase										
3.9.1	2.2	Dust Control Measures To achieve compliance with the FSP, RSP and TSP criteria during the construction phase, good practices for dust control should be implemented to reduce dust impacts. The dust control measures are detailed as follows:	Construction Dust	Contractor	Project construction site / Duration of the construction phase / Prior to commencement of operation		✓		EIA Recommendation and Air Pollution Control (Construction Dust) Regulation	
		■ Covering 80% of stockpiling area by impervious sheets and spraying all dusty material with water immediately prior to any loading transfer operations to keep the dusty materials wet during material handling at the stockpile areas								Y
		Disturbed Parts of the Roads ■ Main temporary access points should be paved with concrete, bituminous hardcore materials or metal plates and be kept clear of dusty materials; or ■ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.								Y
		Wheel washing ■ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.								Y
		Use of vehicles ■ The speed of the trucks within the site should be controlled to about 10 km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. ■ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.								Y
		Site hoarding ■ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit								Y

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Noise Impact Construction Phase										
4.4.6	3.2	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:	Maintain good site practice to minimise / avoid construction noise impact	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		✓		EIAO and Noise Control Ordinance	
		■ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;								Y
		■ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.								Y
		Adoption of QPME QPME should be adopted as far as applicable.								Y
		Use of Noise Enclosure/ Acoustic Shed Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.								Y
		Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. pilling machine etc.).								Y

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Water Quality Impact Construction Phase										
5.6.1.1	4.2	General Construction Activities The following measures should be implemented:	Maintain good site practices to avoid pollution of water courses	Contractor	Within the Project site / During construction phase		✓		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94	
5.6.1.2	4.2	- Construction waste, debris and refuse generated on-site should be stored or contained appropriately to prevent them entering nearby watercourses or blocking stormwater drains. - Regular off-site removal of these materials should be maintained to minimise the volume of waste present on the construction site at any one time.								Y
		Construction Site Runoff The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended: - Temporary site drainage facilities are to be designed and implemented by the Contractor prior to commencement of construction to convey surface runoff to storm drains applying adequately designed silt/ sand removal traps and sediment basins. - Runoff into the excavation areas during rainstorm events shall be minimised as far as practicable. Any wastewater pumped out of the excavation areas shall be treated to remove suspended solids prior to discharge. - Open stockpiles of material should be covered on site with waterproof layers such as tarpaulin to reduce the potential for sediment laden runoff entering the drainage system. - The wheels of all vehicles and plant should be cleaned before leaving the works areas to remove sediment, soil and debris from the tracks. The washwater should be treated to remove any suspended sediment. - Manholes (including those constructed as part of the Project) should be adequately covered and temporarily sealed at all times to prevent silt, construction materials or								Y

		debris from entering the drainage system, and to prevent storm runoff from entering foul sewers. The discharge of surface runoff into foul sewers should be prevented so as not to overload the sewerage system. Discharges should be collected by the temporary drainage system installed by the Contractor and treated on-site to remove sediment prior to discharge to the off-site drainage areas. The Contractor is required to obtain a discharge licence from EPD under the WPCO for all discharges from site with all discharges meeting the water quality requirements of the Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)								
5.6.1.3	4.2	Accidental Spillage of Chemicals In accordance with the Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C), the following measures should be implemented: - The labelling and storage of chemicals should be in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and maintained at all times by the Contractor. - Oils and fuels should only be stored in designated areas which have appropriate pollution prevention control facilities such as oil and grease traps.	Prevent accidental discharge of chemicals into the surrounding environment	Contractor	Within the Project site / During construction phase		✓		Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)	Y
5.6.1.4	4.2	Sewage from Construction Workforce Portable toilets should be available throughout the construction phase and regularly maintained, collected and disposed by a licensed wastecollector to a public sewage treatment works for suitable treatment.	Prevent discharge of sewage into the surrounding environment	Contractor	Within the Project site / During construction phase		✓		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94	Y

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Waste Management Implications Construction Phase										
7.5.1.1	6.2	Good Site Practice Recommendations for good site practices during the construction activities include:	Implement good site practices to minimise waste generation	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		✓		Waste Disposal Ordinance (Cap 354); Waste Disposal (Chemical Wastes) (General) Regulation (Cap	Y
		■ Training of site personnel in proper waste management and chemical handling procedures ■ Provision of sufficient waste disposal points and regular collection of waste ■ Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads							354C); and ETWB Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site	Y
7.5.1.2	6.2	Waste Reduction Measures Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: ■ Sort non-inert C&D materials to recover any recyclable portions ■ Segregation and storage of different types of waste in different containers or skips or stockpiles to enhance reuse or recycling of materials and their proper disposal							Waste Disposal Ordinance (Cap 354)	Y

7.5.1.3	6.2	Inert and Non-inert C&D Materials In order to minimise impacts resulting from collection and transportation of inert C&D materials for off-site disposal, the inert C&D materials should be reused on-site as fill material as far as practicable. In addition, inert C&D materials generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation. The surplus inert C&D materials will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong. The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site. In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the DEVB Technical Circular (Works) No. 6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the ETWB Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site	Minimise impacts resulting from collection and transportation of inert C&D materials	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		✓		Waste Disposal Ordinance (Cap 354); DEVB Technical Circular (Works) No.6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials; and ETWB Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site	Y
7.5.1.4	6.2	Chemical Waste If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Package Labelling and Wastes" Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidising, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal	Implement good practices to avoid chemical waste impact.	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		✓		Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)	Y

		(Chemical Waste) (General) Regulation. Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended								
7.5.1.5	6.2	General Refuse General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Implement good practices to avoid odour nuisance or pest/vermin problem and waste impact.	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		✓		Waste Disposal Ordinance (Cap 354); Public Health and Municipal Services Ordinance (Cap 132) - Public Cleansing and Prevention of Nuisances	Y

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Ecological Impact										
9.7.1	8.3	Temporary Protective Fence for Flora Species of Conservation Interest During construction phase, erection and maintenance of a temporary protective fence enclosing the flora species of conservation interest identified under the detailed vegetation survey is recommended. Monthly monitoring of any other flora species of conservation interest identified in the detailed vegetation survey should be conducted during the construction phase.	To avoid potential impact on flora species of conservation interest from construction activities such as materials storage; To make sure that the flora species of conservation interest are not affected by the construction activities of the Project	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		✓		EIAO-TM	Y
Landscape and Visual Impacts Construction Phase										
Table 10.11	Table 9.1	CM01: Trees / woodland within the Project Site which are unaffected by the works shall be protected and preserved during the detailed design stage and construction phase. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at detailed design stage for further retention of individual trees. The preservation of existing tree shall provide instant greening and screening effect for proposed works. Tree protection works will be undertaken in accordance with DEVB TC(W) 7/2015 on “Tree Preservation” and tree risk assessment in accordance with “Guidelines for Tree Risk Assessment and Management Arrangement by DEVB.	Preserve and protect existing trees	Contractor	Project area / During design stage / construction phase / Establishment Period	✓	✓		EIAO-TM; Protection of Endangered Species of Animals and Plants Ordinance (Cap 586); DEVB TC(W) No. 6/2015 Maintenance of Vegetation and Hard Landscape Features; ETWB TCW No. 29/2004 Registration of Old and Valuable Trees, and Guidelines for their Preservation; DEVB TC(W) No. 07/2015 -Tree Preservation; ETWB (2/2007) - General Guidelines on Tree Pruning; GLTMS (12/2013)	Y

									-Guidelines for Tree Risk Assessment and Management Arrangement on an Area Basis and on a Tree Basis	Y
Table 10.11	Table 9.1	CM05: Decorative screen hoarding will be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs) to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used	Minimise landscape and visual impacts.	Contractor	Project area – areas adjacent to sensitive receivers / During construction phase.		✓		EIAO-TM	Y

Note 1: Des = Design; C = Construction; O = Operation