

APPENDIX A IMPLEMENTATION SCHEDULE OF PROPOSED MITIGATION MEASURES

Table A.1 Implementation Schedule for Air Quality Control

Project Profile Ref #	Environmental Protection Measures / Mitigation Measures	Objectives of the Recommended Measures & Main Concerns	Location / Timing	Implementation Agent	Implementation Stages*				What requirements or standards for the measure to achieve
					Des	C	O	Dec	
S5.1	<p>Dust mitigation measures stipulated in <i>the Air Pollution Control (Construction Dust) Regulation</i> shall be incorporated to control dust emission.</p> <p>The major control measures:</p> <ul style="list-style-type: none"> • Installation of temporary fencing board; • Frequent watering for particularly dust static construction areas; • Dusty materials stockpiled on site should be covered; • Tarpaulin covering the load of dusty materials carried by vehicle transported to, from and between site location; • Where feasible, routing of vehicles and positioning of construction plant should be at the maximum possible separation distance from air quality sensitive receivers. • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs; and • process in order to enforce controls and modify method of work if dusty conditions arise. 	To reduce dust impact arising from the Project	Work site / during construction	MTRCL's Contractors		√			TM on EIA process, APCO, Air Pollution Control (Construction Dust) Regulation

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					Des	C	O	Dec	
Operational Phase									
S5.12	A deodorization system will be provided for the greywater treatment plant. An odour filter / activated carbon adsorption filter should be connected to the exhaust fan of the plant. The chlorination tank will also be enclosed by the proposed car park underneath the Central Park.	To reduce odour impact to nearby ASRs	Greywater Treatment Plant/ During design, construction & operation phases	MTRCL	√	√	√		

All recommendations and requirements resulted during the course of EIA/EA Process, including ACE and / or accepted public comment to the proposed project.

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table A.2 Implementation Schedule for Noise Control

Project Profile Ref #	Environmental Protection Measures / Mitigation Measures	Objectives of the Recommended Measures & Main Concerns	Location / Timing	Implementation Agent	Implementation Stages*				What requirements or standards for the measure to achieve
					Des	C	O	Dec	
S5.2	<p>Good Site Practices during construction:</p> <ul style="list-style-type: none"> • Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program. • Mobile plant, if any, should be sited as far away from NSRs as possible. • Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. • Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. • Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. • Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme. • Contractor shall comply with and observe the Noise Control Ordinance (NCO) and its subsidiary regulations. 	To minimize construction noise impact arising from the Project	Work site / during construction	MTRCL's Contractors		√			NCO, TM on EIA Process

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Table A.3 Implementation Schedule for Water Quality Control

Project Profile Ref #	Environmental Protection Measures / Mitigation Measures	Objectives of the Recommended Measures & Main Concerns	Location / Timing	Implementation Agent	Implementation Stages*				What requirements or standards for the measure to achieve
					Des	C	O	Dec	
Construction Phase									
S5.3	<p>The guidelines for handling and disposal of construction site discharges as detailed in EPD's ProPECC Note PN1/94 "Construction Site Drainage" shall be followed. The major measures are listed as followed.</p> <p><i>Construction Site Runoff and Drainage</i></p> <ul style="list-style-type: none"> Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities shall be based on the guidelines provided in ProPECC PN 1/94. All facilities shall be inspected monthly and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Water pumped out from foundation excavations shall be discharged into silt removal facilities. Open stockpiles of construction materials or construction wastes on-site of more than 50m³ shall be covered with tarpaulin or similar fabric during rainstorms. 	Control potential impacts from construction activities	Work site/ during construction	MTRCL's Contractors		√			EIAO-TM, WPCO
S5.3	<p><i>General Construction Activities</i></p> <ul style="list-style-type: none"> Debris and rubbish generated on-site shall be collected, handled and disposed of properly to avoid entering the nearby 	Control potential impacts from construction activities	Work site/ during construction	MTRCL's Contractors		√			EIAO-TM, WPCO

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	<p>watercourses and storm water drains. Stockpiles of cement and other construction materials shall be kept covered when not being used.</p> <ul style="list-style-type: none"> Oils and fuels shall only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund shall be drained of rainwater after a rain event. 								
S5.3	<p><i>Sewage from Construction Workforce</i> Temporary sanitary facilities, such as portable chemical toilets, shall be employed on-site. A licensed contractor shall be responsible for appropriate disposal and maintenance of these facilities.</p>	Control potential impacts from construction activities	Work site/ during construction	MTRCL's Contractors		√			
Operational Phase									
S5.7	<p>Specific preventive steps to avoid Legionnaires' disease:</p> <ul style="list-style-type: none"> Regularly maintain and clean the treated effluent storage tank to prevent growth of Legionella. This should include twice-yearly cleaning and periodic use of chlorine or other effective biocide Avoid conditions that allow water to stagnate. Frequent flushing of unused water lines will help alleviate stagnation. 	Avoid Legionnaires' disease	Greywater Treatment Plant/ during operation	MTRCL			√		
S5.8	Chlorine disinfectant would be added in the storage tanks for maintaining the chlorine	Comply with required USEPA	Effluent Storage	MTRCL			√		

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	residual as required in USEPA Guidelines.	Guidelines	Tank / During operation						
S5.9	A monitoring programme to be implemented to ensure the performance of disinfection process. The sampling and subsequent laboratory analysis for recycled water stored in the storage tank should be carried out monthly.	Comply with required USEPA Guidelines	Effluent Storage Tank / During operation	MTRCL			√		
S5.9 & S5.11	Measures will be implemented to prevent cross contamination with Water Supplies Department's potable water distribution system to the satisfaction of the Director. The plumbing system of the reclaimed water users to the satisfaction of the Director, should be flushed and sterilized before reconnecting the same to Water Supplies Department's potable water distribution system.	To prevent cross contamination with WSD potable water distribution system	Effluent Storage Tank / During operation	MTRCL			√		
S5.10	Signage of "Recycled Water – Do Not Drink" should be provided. If spray irrigation is employed, spraying should be carried at odd hours only and/or fencing off/excluding the public from entering the irrigation spot during spraying. Spray irrigation should also be located to avoid getting contact with air conditioners, fan intake points and area where food or drink is processed for consumption.	To minimize human contact	Spray irrigation	MTRCL			√		
S5.10	Water features using treated effluent will not be restricted by provision of adequate buffer or barriers	To minimize human contact	Water features/During Operation	MTRCL			√		

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S5.11	In case there is any other unexpected emergency situations for the greywater treatment plant or high infection diseases (e.g. SARS and Avian Flu), the rainwater from the landscape areas or podium would be discharged into storm drain while the condensate from shopping malls and all grey water would be by-passed the greywater treatment system and directed to the sewerage system through the overflow pipes until system recovery.	To ensure the effluent quality complying with the water reuse standard.	Unexpected emergency situations for greywater treatment plant	MTRCL			√		

All recommendations and requirements resulted during the course of EIA/EA Process, including ACE and / or accepted public comment to the proposed project.

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Table A.4 Implementation Schedule for Waste Management Implications

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					Des	C	O	Dec	
Construction Phase									
S5.4	<p><i>Good Site Practices</i> Good site practices during the construction activities include:</p> <ul style="list-style-type: none"> • Nomination of approved personnel, such as a site manager, to be responsible for good site practices and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility. • Training of site personnel in proper waste management and chemical waste handling procedures. • Provision of sufficient waste disposal points and regular collection for disposal. • Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. • Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. • A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed. 	To minimize potential impacts during construction	Work Site/ During the construction period	MTRCL's Contractors		√			ETWB TCW No. 34/2002

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	<ul style="list-style-type: none"> In order to monitor the disposal of C&D material at public filling areas and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements to be implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. One may make reference to WBTC No. 21/2002 for details. 								
S5.4	<p><i>Waste Reduction Measures</i></p> <p>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:</p> <ul style="list-style-type: none"> Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. Separate labelled bins shall be provided to segregate aluminium cans from other general refuse generated by the work force, and to encourage collection of by individual collectors. Any unused chemicals or those with remaining functional capacity shall be recycled. 	To minimize potential impacts during construction	Work site / During the construction period	MTRCL's Contractors		√			Waste Disposal Ordinance (Cap.54) WBTC No.21/2002, ETWB TCW No. 15/2003

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S5.4	<p><i>General Refuse</i></p> <p>General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	To ensure proper management of general refuse	Work site / During the construction period	MTRCL's Contractors		√			Public Health and Municipal Services Ordinance (Cap. 132)
S5.4	<p><i>Construction & Demolition (C&D) Material</i></p> <p>Excavated soft spoil from open trench excavation should be reused on-site as backfill material as far as practicable. Suitable areas should be designated within the works site boundaries for temporary stockpiling of C&D material. Within stockpile areas, the following measures shall be taken to control potential environmental impacts or nuisance:</p> <ul style="list-style-type: none"> • covering material during heavy rainfall; • locating stockpiles to minimise potential visual impacts; and • minimizing land intake of stockpile areas as far as possible. <p>When disposing C&D material at a public filling area, it shall be noted that the material shall only consist of soil, rock, concrete, brick, cement plaster/mortar, inert building debris, aggregates and asphalt. The material shall be free from marine mud, household refuse,</p>	To ensure proper management of C&D material	Work site / During the construction period	MTRCL's Contractors		√			ETWB TCW No.34/2002

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	plastic, metals, industrial and chemical waste, animal and vegetable matter, and other material considered to be unsuitable by the Filling Supervisor.								
S5.4	<p><i>Chemical Wastes</i></p> <p>If chemical wastes are produced at the construction site, the Contractor would 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 Packaging, Labelling and Storage of Chemical 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, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation</p>	To ensure proper management of chemical waste	Work site / During the construction period	MTRCL's Contractors		√			Waste Disposal (Chemical Waste) (General) Regulation

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