ENVIRONMENTAL IMPACT	ASSESSMENT STUDY FOR RE-PROVISION OF OPEN CYCLE GAS TURBINES AT LAMMA POWER STATION
APPENDIX A	IMPLEMENTATION SCHEDULE OF RECOMMENDED MITIGATION MEASURES

Appendix A - Implementation Schedule of Recommended Mitigation Measures

EIA Reference	EM&A Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Impl Stag	ementa Je ^(a)	tion	Relevant Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
Air Quality			i	i	i	·	1	;
S3.9.1	S2	Impervious sheet will be provided for skip hoist for material transport.	Land site/ during decommissioning/ demolition, and construction (particularly dry season)	Contractor(s)		✓		Air Pollution Control (Construction Dust) Regulation
\$3.9.1	S2	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		**************************************		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		*		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	Dropping heights for excavated materials should be controlled to a practical height to minimise the fugitive dust arising from unloading.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		*		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)				Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		*		Air Pollution Control (Construction Dust) Regulation

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			timing of completion of recommended measures		D	С	0	Guidelines
S3.9.1	S2	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	All exposed areas will be kept wet always to minimise dust emission.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	Ultra-low-sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)				Environment, Transport and Works Bureau Technical Circular (ETWB- TC(W)) No 19/2005 on Environmental Management on Construction Sites
S3.9.1	S2	The engine of the construction equipment during idling will be switched off.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		Air Pollution Control (Construction Dust) Regulation
S3.9.1	S2	All marine vessels fuelled in Hong Kong will operate using marine light diesel with sulphur content lower than 0.05%.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		Air Pollution Control (Marine Light Diesel) Regulation
S3.9.1	S2	NRMMs, e.g. mobile generator and air compressor, will comply with the prescribed emission standards with a proper label approved by EPD.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		√		Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

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			timing of completion of recommended measures	Contractor(s)	D	С	0	Guidelines
S3.9.1	S2	Electric power supply for on-site machinery will be provided as far as practicable for construction activities.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		-
S3.12.1	S2	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the decommissioning/ demolition/ construction phases, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)				-
Noise			.t.	. .	<u></u>			
S4.7.1	S3	Machines and construction plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		-
S4.7.1	S3	Only well-maintained construction plant should be operated on-site and should be serviced regularly.	Land site/ during decommissioning/ demolition, and construction	Contractor(s)		✓		-
Water Qualit	;y		u.k.	.Ā				ı.t.
S5.5.1	S4	Wastewater, chemical waste and effluent from cleaning of existing OCGTs would be collected, stored for proper disposal by licensed contractor.	Land site/ during decommissioning/ demolition	Contractor(s)		~		Waste Disposal (Chemical Waste) (General) Regulation
S5.5.2	S4	Silt removal facilities such as silt traps or sedimentation facilities will be provided where necessary to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in <i>ProPECC PN 1/94</i> . All drainage	Land site & drainage/ during construction	Contractor(s)				ProPECC PN 1/94, TM Standard under the WPCO

EIA Reference	EM&A Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Impl Stag	ementa e ^(a)	ation	Relevant Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
		facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.						
S5.5.2	S4	Appropriate surface drainage will be designed and provided, where necessary.	Land site & drainage/ during construction	Contractor(s)		✓		-
S5.5.2	S4	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN</i> 1/94.	Land site & drainage/ during construction	Contractor(s)				ProPECC PN 1/94
S5.5.2	S4	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the stormwater drainage system after accidental spillages.	Land site & drainage/ during construction	Contractor(s)				-
S5.5.2	S4	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ during construction	Contractor(s)		√		-
S5.5.2	S4	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ during construction	Contractor(s)		~		-
S5.5.2	S4	Appropriate numbers of portable toilets shall be provided by a licensed contractor where necessary to serve the construction workers	Land site & drainage/ during construction	Contractor(s)		✓		-

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			timing of completion of recommended measures		D	С	0	Guidelines
		over the construction site to prevent direct disposal of sewage into the water environment.						
S5.8	S4	To ensure proper implementation of the recommended water quality mitigation measures and good construction site practices during the decommissioning/ demolition, and construction phases, environmental site audits on weekly basis is recommended throughout the construction period.	Land site & drainage/ during construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		*		-
Waste Mana	gement		.i.					
S6.5.1	S5	The contractor(s) must ensure that all the necessary waste disposal licences are obtained prior to the commencement of the decommissioning/demolition and construction works.	Contract mobilisation/ during decommissioning/demolition, and construction	Contractor(s)				-
S6.5.1	S5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ during decommissioning/demolition, and construction	Contractor(s)		*		Cap 354N Waste Disposal (Charges for Disposal of Construction Waste, Regulation
S6.5.1	S5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/landfills, and to control fly-tipping.	Contract mobilisation/ during decommissioning/demolition, and construction	Contractor(s)		***************************************		DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S6.5.1	S 5	A WMP as stated in the <i>PNAP ADV-19</i> for the amount of waste generated, recycled and disposed of (including the disposal sites) will	All area/ during decommissioning/demolition, and construction	Contractor(s)		✓		PNAP ADV-19

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			timing of completion of recommended measures		D	С	0	Guidelines
		be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.						
S6.5.1	S5	C&D materials will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the Site will be designated for such segregation and storage if immediate use is not practicable. Prefabrication will be adopted as far as practicable to reduce the construction waste arisings.	Contract mobilisation/ during decommissioning/demolition, and construction	Contractor(s)		✓		-
S6.5.1, 6.5.2	S5	The contractor(s) will register as a chemical waste producer with the EPD. Chemical waste will be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.	All area/ during decommissioning/demolition, construction and operation	HK Electric/ Contractor(s)				Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S6.5.1	S5	Containers used for storage of chemical wastes will: Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;	All area/ during decommissioning/demolition, construction and operation	HK Electric/ Contractor(s)		**************************************		Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and

EIA Reference	EM&A Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Imple Stag	ementa e ^(a)	ation	Relevant Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
		 Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations. 						Storage of Chemical Wastes
S6.5.1	S5	 The storage area for chemical wastes will: Be clearly labelled and used solely for the storage of chemical waste; Be enclosed on at least 3 sides; Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; Have adequate ventilation; Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and Be arranged so that incompatible materials are appropriately separated. 	All area/ during decommissioning/demolition, construction and operation	HK Electric/ Contractor(s)		✓	✓	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S6.5.1	S5	Chemical waste will be disposed of: Via a licensed chemical waste collector; and To a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Facility which also offers a chemical waste collection service and can supply the necessary storage containers.	All area/ during decommissioning/demolition, construction and operation	HK Electric/ Contractor(s)				Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes

EIA Reference	EM&A Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Impl Stag	ementa e ^(a)	ation	Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
S6.5.1	S5	General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered separately from construction and chemical wastes for offsite disposal on a daily basis to reduce odour, pest and litter impacts.	All area/ during decommissioning/demolition and construction	HK Electric/ Contractor(s)		*		-
S6.5.1	S5	Recycling bins will be provided at strategic locations within the Project Site to facilitate recovery of recyclable materials (including aluminium cans, waste papers, glass bottles and plastic bottles, etc.). Materials recovered will be sold for recycling.	All area/ during decommissioning/demolition, and construction	HK Electric/ Contractor(s)				-
S6.5.1	S5	To avoid any odour and litter impact, appropriate number of portable toilets will be provided for workers on-site where appropriate.	All area/ during decommissioning/demolition, and construction	HK Electric/ Contractor(s)		✓		-
S6.5.1	S5	At the commencement of the decommissioning/demolition and construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	During decommissioning/ demolition, and construction	Contractor(s)				-
S6.5.2	S5	General refuse and non-recyclables will be stored in enclosed bins and collected by existing waste management contractor at LPS for disposal at the landfills on a daily basis for avoidance of pest and odour nuisance.	All area/ during operation	HK Electric/ Contractor(s)			*	-
S6.5.2	S5	Recycling bins for recyclable materials (including aluminium cans, waste papers,	Site office/ during operation	HK Electric/ Contractor(s)			✓	-

EIA Reference	EM&A Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Imple Stag	ementa e ^(a)	ation	Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
		glass bottles and plastic bottles) will be placed at the site office and transported offsite for recycling on a regular basis.						
S6.7.1	S5	It is recommended that weekly audits of the waste management practices be carried out during the decommissioning/demolition, and construction phases to determine if wastes are being managed in accordance with the recommended good site practices and WMP. The audits will investigate all aspects of waste management including waste generation, storage, handling, recycling, transportation and disposal.	All area/ during decommissioning, demolition and construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		1		-
Land Contan	nination							
S7.7, S6.1 of Appendix 7A	S6	During the demolition stage, a Land Contamination Specialist shall oversee the removal / demolition activities and record any new visual signs of potential contamination such as oil leakage or oil stains. The Land Contamination Specialist shall also review the need of additional sampling to capture potential contamination observed during the demolition stage.	Land site/ during demolition	Land Contamination Specialist		~		-
S7.7	S6	SI and sampling shall be carried out when the proposed sampling locations are available after the demolition stage.	Land site/ prior to construction	Contractor(s)		√		-
S6.2 of Appendix 7A	S6	Soil and groundwater sampling works will be supervised by a Land Contamination Specialist.	Land site/ prior to construction	Land Contamination Specialist		~		-
S7.9.1	S6	Prior to commencement of demolition works in the Project site, the leftover diesel or other	Land site/ prior to demolition	HK Electric/ Contractor(s)		✓		Waste Disposal (Chemical Wast

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			timing of completion of recommended measures		D	С	0	
		petroleum products in the equipment to be demolished shall be removed as much as possible. The removed diesel or other petroleum products will be reused as far as practicable. The removed diesel and other petroleum products, which cannot be reused are considered as chemical waste and are controlled under the Waste Disposal (Chemical Waste)(General) Regulation. The demolition contractor who will generate the chemical waste or cause it to be produced should register with the EPD as a chemical waste producer. Removed diesel and petroleum products shall be labelled and stored in accordance with the requirement stipulated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes issued by EPD. The removed petrol and petroleum products are required to be collected by licensed chemical waste collector for disposal. Trip tickets system shall be implemented during the collection and disposal of removed petrol and diesel.						(General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S7.9.2	S6	During demolition and construction phases, the following good housekeeping practices shall be implemented to ensure that risk of ground contamination as a result of oil spills or leaks is kept to a practical minimum: Regular visual inspections to detect any early signs of fuel leakage prior to demolition;	All area/ during demolition and construction	Contractor(s)				-

EIA Reference	EM&A Reference	eference Measures/ Mitigation Measures	Location/ duration of recommended measures &	Implementation Agent	Implementation Stage ^(a)			Relevant Legislation &
			timing of completion of recommended measures		D	С	0	Guidelines
		 Provision of impermeable lining or absorbent materials to contain leaks; Provision of secondary containment for the temporary storage of removed diesel or petroleum products, demolished structures and pipes; and Provision of spill control materials and equipment 					Management (1987)	
S7.10	S6	To ensure proper implementation of the good housekeeping practices, weekly site inspections should be carried out during the decommissioning/demolition, and construction phases of the Project.	All area/ during decommissioning/demolition, and construction	Contractor(s))/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		-

⁽a) D: Design, C: Decommissioning/demolition/construction, O: Operation