Annex B Updated EM&A Manual – Implementation schedule for Waste Management Implication (Operation phase)



ANNEX B: UPDATED EM&A MANUAL – IMPLEMENTATION SCHEDULE FOR WASTE MANAGEMENT IMPLICATION (OPERATION PHASE)

AAHK together with the IEC team will commence an inspection exercise at the two runway system interim stage with an aim to complete a final joint inspection / check of new waste management facilities and operational arrangements on commencement of full 3RS operation. AAHK will determine and set waste reduction and recycling performance targets from time to time. Waste management performance monitoring and audit will be conducted by AAHK operation teams at regular intervals and waste management is also covered under AAHK's ISO14001 Environmental Management System. The scope of monitoring and audit will cover aspects of waste handling, storage, segregation, recycling, treatment and disposal. Performance will be assessed to ensure the effectiveness of waste reduction measures implemented and against performance targets set by AAHK.

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Description of Implementation Arrangements for the Environmental Protection Measures in this OWMP	Location / Duration of measures Timing of completion of measures	Duration of	Implementa tion Agent	Implem Stage	entat	ion	Mitigatio Measure Impleme	es
							Des	С	0	Yes	No	
10.5.2.1	7.2		General refuse should be temporarily stored in proper container with covers, which should be regularly cleaned and checked for maintenance. General refuse should be collected on daily basis and delivered to the refuse collection point accordingly. A reputable waste collector should be employed to remove the general refuse regularly for off-site disposal at designated landfill sites in order to avoid odour nuisance or pest/vermin problem. The following waste recycling initiatives should be implemented at the expanded airport:	 The proposed waste storage, handling, collection and disposal arrangements for general refuse are described in Sections 5.1.2, 5.1.3, and 5.2.1 of this OWMP in details. AAHK will provide appropriate facilities, including recycling bins with clear signage, refuse rooms with ventilation or air-conditioning systems, and collection bins with covers / cages at the refuse rooms, in the passenger terminal buildings to facilitate the daily segregation, collection and storage of recyclables and residual waste generated by passengers and tenants. All the collection bins / cages are managed by AAHK's cleaning / waste management 	Project Site Area / Operation Phase	ААНК			✓			



EP Condition	Environmental Protection Measures	Environmental Protection Measures in this OWMP	Location / Duration of measures	Implementa tion Agent	Implementation Stage			Mitigation Measures Implemented?		
			Timing of completion of measures		Des	С	0	Yes	No	
	Recycling facilities should be provided in prominent areas in passenger terminal buildings to facilitate separation of recyclable waste by passengers; Recycling facilities should also be provided in refuse rooms of the passenger terminal buildings to facilitate separation of recyclable waste by tenants;	contractors under the respective services contracts to ensure the appropriate cleaning and maintenance. Non-recyclable wastes or residual wastes, that are collected at AAHK premises and aircraft, will be transferred to the LWS and/ or the AWS and finally will be delivered to the WENT Landfill via Tuen Mun – Chek Lap Kok Link or other licensed waste handling facilities by a reputable licensed waste management contractor on daily basis with submission of records to AAHK. The recovered recyclables will then be sent to Governmental waste handling facilities, or sold to local licensed / reputable recyclers for further processing / conversion to useful materials. To enhance the upstream recyclables collection and segregation, AAHK will provide free recycling bags to tenants and regular training sessions to the frontline staff. AAHK will also provide financial incentive to the waste management contractor to enhance collection and sorting of marketable recyclables under a performance-based contract. To encourage waste reduction, AAHK will require the F&B outlets to minimise waste arising by using reusable dining wares for eat-in customers as far as practical; and will allocate designated areas at the food courts in passenger terminal buildings to facilitate the collection of reusable								
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					Timing of completion of measures								Des	С	0	Yes	No
			Food waste recycling programme should be implemented at the airport to collect and recycle food waste;	 Provision of free designated recycling bags to F&B outlets, airline lounges and retail stores in AAHK managed facilities for food waste segregation at source. 													
			Food waste can be delivered to EPD's Organic Waste Treatment Facilities for recycling as compost;	 Provision of "food waste bins" with covers at refuse rooms in the passenger terminal buildings for disposal by the cleaning contractors and tenants. 													
				 Collected food waste will be regularly transfer by a food waste collection contractor to O·Park1 or other licenced food waste recyclers with submission of monthly records to AAHK. 													
				 Setting out food waste management requirements in tenants/franchisees/licensees agreements requiring tenants/ franchisees/licensees to take all reasonable steps to handle and segregate food wastes arising from their activities and operations, with regular review and audit conducted by AAHK. 													
				 Designated cleaning contractor staff to separate food waste from other wastes in food court areas in the passenger terminal buildings to facilitate food waste separation for recycling. 													
				 Provision of regular training to cleaning staff and tenants on good practices of food waste segregation. 													
				 Implementation of HKIA Food Rescue Programme in partnership with an NGO to collect surplus food from the F&B outlets in the passenger terminal buildings for 													



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			Food & beverage tenants are encouraged to recycle waste cooking oil (e.g., recycling of waste cooking oil to biodiesel); AAHK has stepped up on-site waste separation and recycling at the Airside Waste Station to raise the amount of recyclable materials recovered from aircraft cabin waste.	production of meal boxes, which will be distributed to the needy in Hong Kong. • F&B tenants in AAHK managed facilities are encouraged to recycle their waste cooking oil, which are collected by the licensed contractor(s) and recovered as biodiesel. • Recyclables and wastes from aircrafts and apron areas will be collected and transferred by several ramp handlers or cleaning contractor(s) to the existing AWS for further sorting of marketable recyclables and compaction of residual waste. • An A.I. robotic sorter system installed at the T1 MFC Central Refuse Room will be used for sorting and recovering additional marketable recyclables from targeted waste streams collected from aircraft cabins.	Timing of completion of measures		Des	С	0	Yes	No
10.5.2.2	7.2		Operators of the relevant facilities should register with EPD as a chemical waste producer and 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. Licensed collector should	 The proposed arrangements for management of chemical waste are described in Section 5.2.2 of this OWMP. Relevant measures are outlined below. AAHK and/or owners/ operators of the relevant facilities in AAHK managed facilities, who generate chemical waste will register with the EPD as chemical waste producer(s) and 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 will be used, and incompatible chemicals will be stored separately. 	Project Site Area / Operation Phase	AAHK / Operators			✓		



ENVIRONMENTAL RESOURCES MANAGEMENT

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					Timing of completion of measures		Des	С	0	Yes	No
			be deployed 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 (Chemical Waste) (General) Regulation.	Appropriate labels will be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste. Licensed collector(s) will be deployed to transport and dispose of the chemical wastes at the Chemical Waste Treatment Centre at Tsing Yi or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. A trip-ticket system will be implemented to record the consignment of chemical waste.							
10.5.2.3 to 10.5.2.5	7.2	-	Regular cleaning and inspection of seawall. If refuse is found during inspection, arrangements should be made to remove the refuse.	The proposed arrangements for management of floating refuse are described in Section 5.2.3 of this OWMP. Relevant measures are outlined below. Weekly inspection will be carried out by the contractor(s) along the artificial seawall of the expanded airport island to check for any entrapment or accumulation of floating refuse. Where excessive entrapment of floating refuse is found, the locations of such entrapment will be recorded and the contractor(s) will be arranged immediately for clearance of floating refuse. Floating refuse collected from the seawall will be sent to the WENT Landfill via Tuen Mun – Chek Lap Kok Link.	Project Site Area / Operation Phase	Contractor			✓		
10.5.2.6	7.2	- -	Sludge generated from the proposed greywater treatment plant will be mechanically dewatered,	The proposed arrangements for management of sludge are described in Section 5.2.4 of this OWMP. Relevant measures are outlined below.	Project Site Area /	Contractor			✓		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Description of Implementation Arrangements for the Environmental Protection Measures in this OWMP	Location / Duration of measures	Duration of	Duration of	Duration of	Implementa tion Agent	Impleme Stage	mentation		Mitigation Measure Impleme	es
					Timing of completion of measures		Des	С	0	Yes	No			
			which will then be delivered to the designated landfill sites for final disposal.	Mechanical dewatering of sludge generated from the proposed greywater treatment plant.	Operation Phase									
				 Dewatered sludge will be stored in tight containers or skips for delivery to the North Lantau Transfer Station via North Lantau Highway, or the WENT Landfill via Tuen Mun Chek Lap Kok Link for disposal/recycling by reputable licensed waste collector(s). 										

