

Table C-3 Implementation Schedule of Recommended Mitigation Measures

No.	Activity	Mitigation/ EIA Recommendations	Responsibility for Implementation	Location Duration completion Of measures	Implementation Stage	Relevant Guidelines Legislation
1	Ash Disposal					
I	Treatment	The ash deposits are mainly contaminated by dioxins and furans and mixed with asbestos containing materials. Handling, transportation and disposal of the ash waste in line with relevant regulations. Collection, immobilisation and testing of waste for disposal to landfill shall be carried out according to the relevant regulations and recommendations of the EIA including immobilisation by collection and mixing the ash material with cement. Pilot mixing and TCLP tests should establish the ratio of cement to ash to the satisfaction of EPD. Ash waste to be treated and placed into steel drums lined with plastic sheeting. The drums should be adequately sealed and in new or good condition. Prior agreement of the disposal criteria from EPD and agreement to disposal from the landfill operator must be obtained. As an additional measure, release of contaminants from disturbed ash should be minimised prior to gathering up the ash materials and amended water containing a wetting agent should be sprayed on the ash. The wetting agent will assist in water penetration to thoroughly soak the ash and ensure dust levels are reduced without using excessive water. The use of amended water for dust suppression will minimise the use of excessive water that would result in surface runoff in the removal process. Dust suppression can be carried out in a controlled manner and no insurmountable environmental problem would result	CEDD's Contractor	KTCDAs work areas. Duration of the ash removal	A@	1, 10, EIA
II	Disposal	To monitor the disposal of waste at landfills, a "trip-ticket" system (WBTC No. 5/99) for all solid waste transfer/disposal operations should be implemented. The system should be included as a contractual requirement, and monitored by the Environmental Team and audited by the Independent Checker (Environment).	CEDD's Contractor	As above	A	1, 5, 9
III	Asbestos Removal	An asbestos abatement programme should be submitted to EPD for approval prior to the commencement of the asbestos abatement work.	CEDD and Contractor	As above	A	4
2	Demolition					
A	Non-blasting Methodology	Waste Management Plan to be submitted to EPD. Demolition by Non-Blasting Methodology Only. All structures and buildings should be demolished and removed prior to demolition of chimneys	CEDD	KTCDAs work areas. Duration of the demolition	C#	8
B	Material Storage	Covers for dusty stockpiles and control of dust emissions from construction (demolition) works requires appropriate dust control measures to be implemented in accordance with the requirements in the Air Pollution Control (Construction Dust) Regulation.	CEDD's Contractor	As above	C	4
C	Vehicle movement	Haul road watering, vehicle wheel wash prior to exit. Where practical, access roads should be protected with crushed gravel.	CEDD's Contractor	As above	C	4

No.	Activity	Mitigation/ EIA Recommendations	Responsibility for Implementation	Location Duration completion Of measures	Implementation Stage	Relevant Guidelines Legislation
D	Plant maintenance	All plant shall be maintained to prevent any undue air emissions.	CEDD's Contractor	As above	Prior to start of works	4
E	Improved Site Hoarding	Boundary hoarding to be modified in form of noise barrier to provide effective noise screening and made of panels with a superficial surface density of at least 10 kg/m ³	CEDD's Contractor	As above	C	Env. Permit
F	Demolition Sequence	Include careful consideration and positioning of portable noise barriers to allow noise attenuation.	CEDD's Contractor	As above	C	8
G	Portable Noise Barriers	Moveable noise barriers shall be provided close to PME in cases where, in the opinion of the Engineer, such PME has the potential to cause noise nuisance to sensitive receivers and where a benefit will result. Such barriers shall be made of panels with superficial surface density not less than 10 kg/m ³ .	CEDD's Contractor	As above	C	Env. Permit
H	Plant Operation	Modify continuous operational periods for noisy plant to comply with noise criteria.	CEDD's Contractor	As above	C	Env Permit
I	Demolition Techniques	Selection of non-blasting demolition techniques to minimise noise and vibration.	CEDD's Contractor	As above	C	8
J	Plant maintenance	All plant shall be maintained to prevent any undue noise nuisance.	CEDD's Contractor	As above	C	2, 3
K	Wheel wash	All wheel wash water shall be diverted to a sediment pit.	CEDD's Contractor	As above	C	5
L	Sediment control	Sediment removal facilities shall provided and be maintained and excavated as necessary to prevent sedimentation of channels. Perimeter channels should be provided. Works should be programmed for the dry season where feasible. Environmental guidelines for the handling and disposal of discharges from construction sites, as stipulated in the Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94) to be followed.	CEDD's Contractor	As above	C	5, 12
M	Surface water diversion	All clean surface water shall be diverted around the site.	CEDD's Contractor	As above	C	5, 12
N	Fuel can storage	All fuel cans shall be placed within a bunded area. Any fuel spills shall be mopped up as necessary.	CEDD's Contractor	As above	C	5,6
O	Material, plant movement & fuel can filling.	Any fuel or oil spills shall be excavated and disposed of.	CEDD's Contractor	As above	C	6,7
P	Generators	All generators shall be placed within a bunded area. Any fuel spills shall be mopped up as necessary.	CEDD's Contractor	As above	C	5,6,7
Q	Material containers	All empty bags and containers shall be collected for disposal.	CEDD's Contractor	As above	C	6,7

No.	Activity	Mitigation/ EIA Recommendations	Responsibility for Implementation	Location Duration completion Of measures	Implementation Stage	Relevant Guidelines Legislation
R	Worker generated litter and Waste	Litter receptacles shall be placed around the site. Litter shall be taken regularly to the refuse collection points. Chemical toilets (or suitable equivalent) should be provided for workers. Any canteens should have grease traps.	CEDD's Contractor	As above	C	6
S	Neighbourhood nuisance	All complaints regarding construction works shall be relayed to the environmental team.	CEDD's Contractor	As above	C	1, 6
T	Legal requirements	Different types of waste should be segregated, stored, transported and disposed of in accordance with the relevant legislative requirements and guidelines	CEDD's Contractor	As above	C	1,6
U	On-site separation	On-site separation of municipal solid waste and construction/demolition wastes shall be conducted in order to minimise the amount of solid waste to be disposed to landfill.	CEDD's Contractor	As above	C	1, 11
V	Temporary storage area	Separated wastes should be stored in different containers, skips, or stockpiles to enhance reuse or recycling of materials and encourage their proper disposal.	CEDD's Contractor	As above	C	1, 11
W	Record of wastes	Records of quantities of wastes generated, recycled and disposed (with locations) shall be kept.	CEDD's Contractor	As above	C	1, 9
X	Trip-ticket system	To monitor the disposal of waste at landfills and control fly-tipping, a "trip-ticket" system under WBTC N0.5/99 for all solid waste transfer/disposal operations should be implemented. The system should be included as a contractual requirement, and monitored by the Environmental Team and audited by the Independent Checker (Environment).	CEDD's Contractor	As above	C	1, 9
4	Monitoring and Audit	To be carried out in accordance with the Implementation Schedule in Table AC-2.	CEDD*/ Contractor/ RSS	KTCDAs works areas During demolition	C	1

* Normally undertaken by a specialist monitoring team employed directly by the proponent and audited by the IEC

@ A = during ash removal (before demolition)

C = during construction (i.e. demolition phase).

1. Environmental Impact Assessment Ordinance Technical Memorandum (EIAO)
2. Noise Control Ordinance
3. The ProPECC Note PN2/93 (Construction Noise daytime limits)
4. Air Pollution Control Ordinance (APCO)
5. Water Pollution Control Ordinance (WPCO)(Cap. 358)
6. Waste Disposal Ordinance (Cap 354)
7. Waste Disposal (Chemical Waste)(General) Regulation (Cap 354)
8. Draft Code of Practice on Demolition of Buildings (BD, 1998)
9. Works Bureau Technical Circular No. 5/99, Trip-ticket System for Disposal of Construction and Demolition Material
10. Guidance Notes for Investigation and Remediation of Contaminated Sites
11. Works Bureau Technical Circular No. 5/98, On Site Sorting of Construction Waste on Demolition Sites
12. ProPECC Note PN 1/94Construction Site Drainage

Table C-4 Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
Air Quality								
6.3.2		Adoption of good site practices and avoid practices likely to raise dust level	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
6.3.2		Frequent cleaning and damping down of stockpiles and dusty areas of the Site.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
6.3.2		Reducing drop height during material handling or wall felling.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
6.3.2		Imposing a vehicle speed restriction of 15 km/hr within the Site and confine haulage and waste collection vehicles to designated roadways inside the site.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
6.3.2		Provision of wheel washes facilities for Site vehicles leaving the Site.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
6.3.2		Regular plant maintenance to minimise exhaust emission.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
6.3.2		Sweep up dust and debris at the end of each shift.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
	2.9.1	Stockpiles of dusty waste materials greater than 20m ³ shall be enclosed on three sides, with walls extending above the pile and 2 metres beyond the front of the pile.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
	2.9.1	Any vehicle with an open load carrying area used for moving potentially dusty material shall have properly fitting side and tail-	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
		boards. Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards and shall be covered by a clean tarpaulin in good condition. The tarpaulin shall be properly secured and shall extend at least 300m over the edges of the side and tail-boards.						(Construction Dust) Regulation; EIAO-TM
	2.9.1	Effective water sprays shall be used during the collection and loading of dusty wastes and other similar materials, when dust is likely to be created and to dampen all stored materials during dry and windy weather.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
	2.9.1	Areas within the KTCDA site where there is a regular movement of vehicles, shall have an approved hard surface and be kept clean of loose surface material.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
	2.9.1	Conveyor belts shall be fitted with wind-boards, and conveyor transfer points and hopper discharge areas shall be enclosed to minimize dust emission. All conveyors carrying materials which have the potential to create dust shall be totally enclosed and fitted with belt cleaners.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
	2.9.1	Adequate dust suppression plant including water bowers with spray bars shall be provided.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		APCO (Cap. 311); Air Pollution Control (Construction Dust) Regulation; EIAO-TM
Noise								
5.8.1 & 5.8.2		Movable barriers as noise shields shall be considered for deployment close to noisy equipment. Where required, these should be made of panels with a superficial surface density of at least 7 kg/m ² .	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		NCO (Cap. 400); EIAO-TM; PN 2/93
5.8.2	3.8.3	Silenced and super silenced type equipment.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		NCO (Cap. 400); EIAO-TM; PN 2/93
5.8.2		Reduction in number of plant operating simultaneously.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		NCO (Cap. 400); EIAO-TM; PN 2/93
5.8.2		Use of modified site hoarding to a perimeter noise barrier as a noise shield.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		NCO (Cap. 400); EIAO-TM; PN 2/93
5.8.2		Re-scheduling and restricting hours of operation of noisy tasks.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		NCO (Cap. 400); EIAO-TM; PN 2/93
Water Quality								
	4.3.2	Use of sediment traps, where appropriate.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
	4.3.2	Adequate maintenance of drainage systems to prevent flooding and overflow.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.3	Provision of temporary channels to facilitate run-off discharge into the appropriate watercourses, via a silt retention pond, and permanent drainage channels to incorporate sediment basins or traps and baffles to enhance deposition rates.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.4	Provision of temporary and permanent drainage pipes and culverts to facilitate run-off discharge and shall be adequately designed for the controlled release of storm flows.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.4	Regular cleaning and maintenance of all sediment traps.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.4	When construction works has finished or the temporary diversion is no longer required, temporarily diverted drainage shall be reinstated to its original condition.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.5	Installation of wheel washing facilities to ensure no earth, mud and debris is deposited on roads. Sand and silt in the wash water from such facilities shall be settled out and removed prior to discharge of the used water into storm drains. A section of the road between the wheel washing bay and the public road shall be paved with backfill to prevent wash water or other site run-off from entering the public road drains.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.6	Provision of oil interception facilities in appropriate areas in the drainage system, where oil spills may occur, and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillage.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.9	Debris and rubbish on site should be collected, handled and disposed or properly to prevent such material from entering the water column and causing water quality impacts.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		PN 1/94, WPCO (Cap. 358)
	4.3.10	Fuel storage areas should be provided with locks and be sited on sealed areas if required, within bunds of a capacity equal to 110% of the storage capacity of the largest container (to provide a safety margin) and control spilt fuel oils.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
Waste Management – General								
7.11.2	5.2.33	The Waste Management Plan shall be prepared in accordance with WBTC No. 29/2000 (superseded by ETWB TC(W) No. 15/2003) and shall provide details of the measures and procedures considered necessary to control and manage the storage, transportation and disposal of all wastes generated during the demolition.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor	✓	✓		ETWB TC(W) No. 15/2003

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
7.10.30	5.2.37	Wastes should be handled and stored in a manner which ensures that they are held securely without loss or leakage thereby minimising the potential for pollution.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	Only reputable waste collectors authorised to collect the specific category of waste concerned should be employed.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	Appropriate measures should be employed to minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	The necessary waste disposal permits should be obtained 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) and Government Land Ordinance (Cap 28).	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354), Government Land Ordinance (Cap 28).
7.10.30	5.2.37	Collection of general refuse should be carried out frequently, preferably daily.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	Waste should only be disposed of at licensed sites and site staff and the civil engineering Contractor should develop procedures to ensure that illegal disposal of wastes does not occur.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	Waste storage areas should be well maintained and cleaned regularly.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.30	5.2.37	Records should be maintained of the quantities of wastes generated, recycled and disposed, determined by weighing each load.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
Waste Management - General Refuse								
7.10.20	5.2.27	Office wastes can be reduced through the policies for re-use of paper in printers and copiers for draft documents.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The policies of recycling e.g. paper and toners or cartridges if volumes are large enough to warrant collection, should be encouraged with participation in a local collection scheme if one is available.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		In order to reduce waste, the number of photocopies shall be reduced to a minimum while internal documents and external documents shall be copied on both sides of paper where appropriate. Recycling bins for paper and toners will be provided in site office to facilitate the recycling of paper.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
7.10.19	5.2.26	General refuse is generated largely by food service activities on site, so reusable rather than disposable dishware should be used if feasible. Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Putrescible wastes, such as lunch box, and domestic wastes generated on-site shall be stored in enclosed bins or compaction units separate from C&D and chemical wastes. Waste paper will be stored in containers clearly marked as recyclable or waste.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Public Health and Municipal Services Ordinance (Cap. 132)
7.10.18	5.2.25	A reputable waste collector should be employed by the Contractor to remove general refuse, separately from C&D material and chemical wastes, preferably daily to minimise odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Public Health and Municipal Services Ordinance (Cap. 132), Air Pollution Control (Open Burning) Regulation
		Waste disposal records shall be obtained from the appropriate authorities and collection of general refuse and general site housekeeping should be carried out.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Waste Disposal Ordinance (Cap. 354); Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354); Government Land (Miscellaneous Provisions) Ordinance (Cap. 28).
Waste Management - C&D Materials								
7.10.7	5.2.7	The Contractor should recycle C&D material on-site as far as possible. Planning, careful design and good site management of the demolition process can minimise over ordering and avoidable waste. Areas within the Site areas can be segregated for the separation and storage. Proper segregation of wastes on Site will increase the feasibility of utilising recycling contractors to recycle certain components of the waste stream. Concrete and masonry can be crushed and used as fill to level the Site after demolition. However there will be little or no excavation of any underground structures therefore the majority of inert waste will need to be delivered to public filling areas. Steel reinforcing bars can be re-used by scrap steel mills.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor	✓	✓		ETWB TC(PS) No. 25/99, 12/2000; ETWB TC(W) No. 15/2003
		"Selective Demolition" involves demolition and removal of wastes of	KTCDA Site -	CEDD's		✓		

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
		the same category one at a time. In general, domestic wastes such as furniture, household appliances; metal components such as window frames, pipes; timber components such as doors, wooden floors; and other wastes such as tiles, asphalt materials, ceramic products should be removed first. The building demolition shall begin after all the above non-structural materials have been stripped and removed. To avoid mixing the non-recyclable bricks with the broken concrete, the demolition sequence should be planned in such a way that brick walls are demolished first and stockpiled separately before the demolition of structural members.	Phase 1 Part 1	Contractor				
		All C&D materials arising from the demolition work shall be sorted on-site and separated into different groups for off-site disposal at landfills, public filling areas, in filling areas provided by the Contractor, or recycling at the C&D waste recycling facilities as appropriate. All fill to be disposed of at public filling areas have to be sorted and broken down to meet the requirements of the Dumping Licence conditions.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		ETWB TC(PS) No. 12/2000
		Designated areas for segregation and temporary storage of reusable and recyclable materials should be identified in the Waste Management Plan to be prepared by the Contractor. The Contractor should recycle as much of the C&D material as possible on site. Different areas of the work site should be designated for such segregation and storage wherever site conditions permit.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		C&D material should be removed from site as soon as practicable to avoid adverse environmental impacts due to on-site storage of the material. It should be sorted/separated at the construction site as far as practicable into two main types: inert (including soil, rock, concrete, brick, aggregates and asphalt) and non-inert (wood, paper, general garbage and other inorganic). Recyclable C&D materials such as broken concrete and rock should be further sorted out from the inert portion and be delivered to recycling facilities as designated by the Engineer's Representative for processing into recycled aggregates for use in construction. The non-recyclable inert portion can be used as public fill for dumping in public filling areas whilst the non-inert portion is classified as C&D waste which will require to be disposed of at the WENT Landfill Site or other areas as designated by EPD.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The Environment, Transport and Works Bureau Technical Circular (Works) No. 31/2004 – Trip Ticket System for Disposal of Construction & Demolition Materials promulgates the amended trip	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		ETWB TC(W) No. 31/2004

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
		ticket system (TTS) for public works contracts including capital works contracts, where C&D materials including waste generated on site require disposal.						
Waste Management - Chemical Waste								
7.10.10	5.2.10	For those processes that generate chemical waste, it may be possible to find alternatives which generate reduced quantities or even no chemical waste, or less dangerous types of chemical waste.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.11	5.2.11	Chemical waste that is produced, as defined under Section 3 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Waste Disposal (Chemical Waste) (General) Regulation
7.10.12	5.2.12	Containers used for the storage of chemical wastes should: a) Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; b) Have a capacity of less than 450 l unless the specifications have been approved by the EPD; and; c) Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.13	5.2.13	The storage area for chemical wastes should: a) Be clearly labelled and used solely for the storage of chemical waste; b) Be enclosed on at least 3 sides; c) Have an impermeable floor and bunding, of capacity to accommodate 100% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; d) Have adequate ventilation; e) Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); and f) Be arranged so that incompatible materials are adequately separated.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.14	5.2.14	Disposal of chemical waste should: a) Be via a licensed waste collector; and b) Be to a facility licensed to receive chemical waste, such as CWTC, which also offers a chemical waste collection service and can supply the necessary storage containers; or c) Be to a recycling or reprocessing facility licensed by EPD.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
7.10.16	5.2.15	Asbestos waste that is produced should be handled in accordance with the Code of Practice on the Handling, Transportation and Disposal of Asbestos Wastes. Detailed requirements have been presented in the Asbestos Study Report.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Type 1 asbestos wastes (bonded asbestos wastes (other than blue or brown asbestos) in good condition) shall be packed with 2 individual layers of strong transparent plastic sheets of not less than 0.15 mm thickness and completely sealed with adhesive tapes. Type 1 waste shall be packed in suitable sizes for easy handling. The height of each package shall not exceed 750 mm.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Type 2 asbestos wastes (any waste containing loose asbestos fibres (other than blue or brown asbestos)) must be contained, as soon as it is produced, in strong bags made from plastic or other containers approved by EPD. The bags should be goose-neck sealed by means of adhesive tapes. A bag filled with asbestos waste should be placed inside another plastic bag to provide additional protection. The colour of the inner bag should be white while the outer bag should be transparent to facilitate visual inspection.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The handling of Type 3 asbestos wastes (all blue asbestos (crocidolite) and brown asbestos (amosite), whether in good condition or not, or any articles contaminated by blue or brown asbestos) should be similar to that of Type 2 except that the colour of the inner bags should be orange.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		All storage of asbestos waste should be carried out properly in a secure place isolated from other substances so as to prevent any possible release of asbestos fibres into the atmosphere and contamination of other substances. Type 1 asbestos waste should not be stored together with Types 2 and 3 asbestos wastes so as to avoid damage to the plastic bags of Type 2 or 3 asbestos waste, unless the bags are packed in boxes or drums for additional protection. Bagged asbestos waste should not be stacked more than 3 bags high in order to avoid damage to the bottom bag. The storage area should be isolated from other working areas and bear warning panels to alert people of the presence of asbestos waste.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Disposal of asbestos wastes shall not commence before a designated notification has been given to EPD and confirmed. Before being transported for disposal, all the asbestos waste produced should be stored in a temporary storage area.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Section 7 of the Code of Practice on the Handling, Transportation and

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
								Disposal of Asbestos Waste.
		All asbestos wastes for disposal should be transported by an asbestos waste collector licensed by EPD and in a designated vehicle equipped as stated in the Code of Practice.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The ash/rubble in between the Chimneys A and B on-site shall be treated by solidification / stabilisation with cement, and the treated ash shall be sealed into steel drums lined with plastic sheeting prior to disposal at designated areas in the landfill.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The proposed disposal method for ash waste is to be collected up and stabilised to meet landfill disposal criteria of EPD. In such case, it is envisaged that the process would involve collection and mixing the ash material with cement. Pilot mixing and TCLP tests would establish the ratio of cement to ash to the satisfaction of EPD. The materials for disposal would then be treated and the extracted material placed into polythene lined steel drums. Transparent plastic sheeting of 0.15mm thickness low-density polythene or PVC should be employed. The drums should be 16 gauge steel or thicker and fitted with double bung fixed ends adequately sealed and well labelled in new or good condition. Prior agreement of the disposal criteria from EPD and agreement to disposal from the landfill operator must be obtained.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The release of contaminants from disturbed ash should be minimised prior to gathering up the ash materials and amended water containing a wetting agent should be sprayed on the ash. The wetting agent will assist in water penetration to thoroughly soak the ash and ensure dust levels are reduced without using excessive water. (Spray shall comprise 50% polyoxyethylene ester and 50% polyoxyethylene ether, or equivalent, diluted to specific concentration in accordance with the manufacturer's instructions). The use of amended water for dust suppression will minimise the use of excessive water that would result in surface runoff in the removal process. Dust suppression can be carried out in a controlled manner and no insurmountable environmental problem would result.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Where the level of dioxin contaminants exceeded the USEPA criterion of 1ppb (parts per billion) by weight, the remediation strategies for contaminated material are recommended as follows: a) Ash/rubble waste shall be collected up and stabilised / solidified to meet landfill disposal criteria of EPD, 1 part per billion (1ppb TEQ)	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
		TCLP; b) It is envisaged that the process would involve collection and mixing the ash/rubble material with cement followed by sealing in polythene lined steel drums; c) Pilot mixing of the ash with progressively greater proportions of cement would precede the treatment; and d) The stabilised / solidified DCM that is contained in polythene lined steel drums shall be transported for landfill disposal.						
		The chimney interior shall be brushed clean. The brushed out materials including ash and dust shall be sealed in steel drums before disposal at the CWTC. Subsequently the internal brick lining shall be scrapped and HEPA vacuumed to thoroughly remove the ash attached. The clean bricks shall then be dismantled from top to bottom and placed inside steel drums before disposal at the landfill.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		Proper decontamination facilities similar to that employed in asbestos removal works (i.e. 3-chamber decontamination units) shall be adopted. Workers shall be protected with disposable coveralls and appropriate respirators suitable for protection against asbestos fibre and dioxin, as well as to fulfil confined space requirements.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The flue sections shall either be thoroughly cleaned with high efficiency vacuum and wet cloth to remove all dioxin-contaminated ash, or the dismantled sections, considered as chemical wastes, wrapped with impermeable polythene sheets for proper disposal to landfill following the requirements of the Waste Disposal (Chemical Waste) (General) Regulation.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		Waste Disposal (Chemical Waste) (General) Regulation.
		The required decontamination shall be conducted under negative pressure with all openings and uncontaminated areas sealed with impermeable plastics. This requirement is analogous to the 'full containment' requirements for asbestos removal works. The chimney flues should be taken down in manageable sections within the containment, and any ash deposits scrapped off and sealed in drums for disposal to landfill site.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
		The flue sections shall either be cleaned with high efficiency vacuum and wet cloth, or wrapped with impermeable plastics for disposal to landfill site. The flues will be removed from top down and hence the ACM will be removed when the removal of chimney flue sections has proceeded down to the levels where the ACM is located.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		

EIA Ref.	EM&A Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stage			Relevant Legislation and Guidelines
					D	C	O	
		Given the nature of the work and the contaminants involved consideration should be given to the use of decontamination facilities (showers) that should be provided for the workforce to remove contamination after work.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.21	5.2.28	Different types of waste should be segregated and stored in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.22	5.2.39	An on-site temporary storage area should also be provided.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		
7.10.25	5.2.32	A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed.	KTCDA Site - Phase 1 Part 1	CEDD's Contractor		✓		ETWB TC(W) No. 15/2003

Table C-5 Event Contingency Plan for Environmental Complaints

STEP	DAY	ACTION	CONTRACTOR	ER	ET	IEC
1	1	Party receiving complaint shall create a new complaint record. If the Contractor receives a complaint, he shall pass the information to the ER.	◆	◆	◆	
2	1	ER to ensure details of complaint provided to Contractor (if complaint not originally received by the Contractor), ET and IEC		◆		
3	2	Within 1 working day after the receipt of the Notification of Complaint, provide ER relevant works site information, e.g. types and locations of construction works.	◆			◇
4	2	Investigate the complaint to determine its validity, and to assess whether the source of the problem is due to the works activities. Report the validity of the complaint to ER.				◆◇
5	2	If complaint is valid and due to works, ER shall notify the Contractor. If complaint is invalid or not due to works, Go to Step 12.		◆		
6	2	Propose mitigation measures to ER within 1 working day of the receipt of the Notification.	◆			◇
7	2	Review and agree with the proposed mitigation measures and make recommendations where necessary.		◆◇		◆◇
8	2	Implement the mitigation measures once they have been agreed.	◆			
9	4	Audit the implementation of the proposed mitigation measures on site within 2 working days after measures have been agreed.		◆◇		◆◇
10	-	Undertake additional monitoring to verify the situation where necessary.			◆	
11	4	Report the investigation results and subsequent actions taken to ER within 2 working days after the implementation of mitigation measures.	◆		◆	
12	5	Respond to the complainant within 1 working day after receiving the investigation report.		◆		
13	25	If no further comments or complaints are received from the complainant within 20 working days after responding to the complainant, close the complaint record. If the complainant has further comments or complaints on the same issue, notify other parties on the same day and go to step 2.		◆		◆◇

◆ Action Party

◇ Enter comments/ proposals into appropriate complaint record where applicable