

Enhanced Ash Utilisation and Water Management Facilities at Castle Peak Power Station

Monthly Audit Report for January 2020

February 2020

AECOM ASIA CO. LTD.

Disclaimer:

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1 INTRODUCTION

1.1 Project Background

- 1.1.1 Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (DEP) granted an environmental permit (No. EP-441/2012) to the Castle Peak Power Company Limited (CAPCO) on 23 July 2012 to construct and operate the designated project for Enhanced Ash Utilisation and Water Management Facilities at Castle Peak Power Station (hereinafter referred to as "the Project"). An application for variation of environmental permit (VEP) was subsequently made and the revised EP (No: EP-441/2012/A) was issued by DEP on 29 June 2018.
- 1.1.2 CAPCO appointed AECOM Asia Company Limited (AECOM) as the Independent Checker (IC) to undertake environmental audit work for the Project.

1.2 Purpose of the Report

1.2.1 Under the EP Condition 2.3, the audit for the implementation of all mitigation measures recommended in the Project Profile (Register No. PP-468/2012) commenced in November 2019. This is the third Monthly Audit Report which summarises the audit findings for the Project during the reporting period from 1 to 31 January 2020.

1.3 Report Structure

- 1.3.1 This Monthly Audit Report is organised as follows:
 - Section 1: Introduction
 - Section 2: Project Information
 - Section 3: Environmental Site Inspection
 - Section 4: Implementation Status of Environmental Mitigation Measures
 - Section 5: Conclusions

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2 PROJECT INFORMATION

2.1 Site Description

2.1.1 The Project site is located within the boundary of the existing Castle Peak Power Station (CPPS). The locations of the key project components are shown in **Appendix A**.

2.2 Construction Programme and Activities

- 2.2.1 The major construction activities undertaken in the reporting month are summarised below:
 - Hacking of pad footings;
 - · Backfilling after the hacking of pad footings; and
 - Soil replacement conduction test.
- 2.2.2 The major construction activity for the coming month is backfilling.
- 2.2.3 The construction programme is presented in **Appendix B.**

2.3 Status of Environmental Licences, Notification and Permits

2.3.1 Relevant environmental licences, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarised in **Table 2.1**.

Table 2.1 Status of Environmental Licences, Notifications and Permits

Permit / Licence No. / Notification/ Reference	Valid F	Period	Status	Remarks
No.	From	То		
Environmental Permit	I	I	<u> </u>	
EP-441/2012/A	29 June 2018		Valid	
Billing Account for Cons	struction Waste D	Disposal		
7033071	25 January 2019		Valid	
				•
Notification Under Air Po	ollution Control (Construction D	ust) Regulation	·
444243	15 April 2019		Valid	

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3 ENVIRONMENTAL SITE INSPECTION

3.1 Environmental Site Inspection

- 3.1.1 Site inspections were carried out by the IC on a bi-weekly basis to monitor the implementation of mitigation measures for the Project.
- 3.1.2 In the reporting month, the site inspection was carried out on 10 and 22 January 2020, respectively. Both IC inspections were conducted jointly with the Contractor. No non-compliance was recorded during the site inspections. Findings and recommendations for the site inspection in this reporting month are summarised as follows and details of observations recorded during the site inspections are presented in **Appendix C**.
 - 10 January 2020:
 - No specific observation was identified in this inspection.
 - 22 January 2020:
 - Excavator operated without the NRMM label was observed. The Contractor was advised to affix the NRMM label on the PME on site.
- 3.1.3 All follow-up actions requested by IC during the site inspections were taken as reported by the Contractor and confirmed by the IC in the subsequent site inspection conducted during the reporting period. There is no outstanding follow-up action at the time of this report.

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1.1 The Contractor has implemented all the relevant environmental mitigation measures as recommended in the Project Profile. The implementation status of the environmental mitigation measures during the reporting period is summarised in **Appendix D**.

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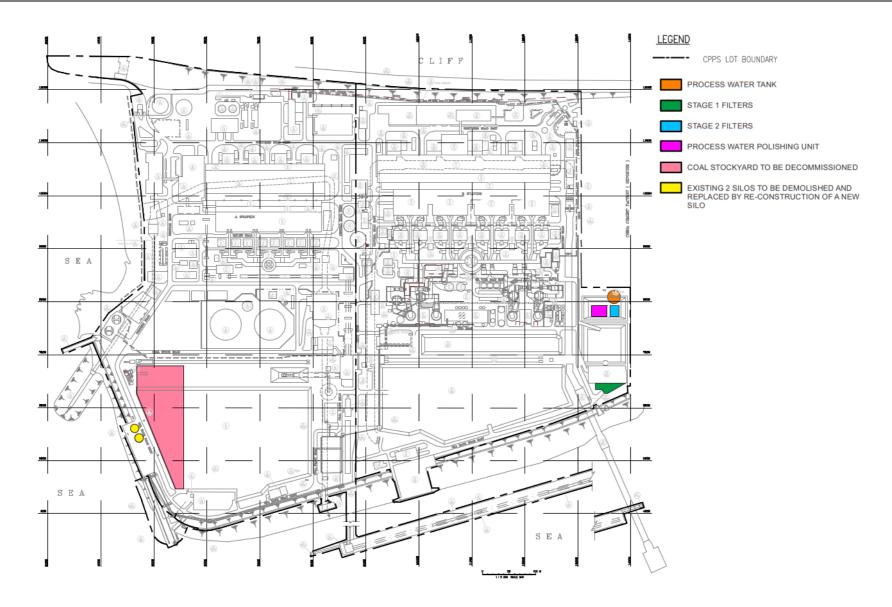
5 CONCLUSION

- 5.1.1 Two environmental site inspections were carried out for the Project in the reporting month of January 2020. No non-compliance was recorded during the site inspections. Based on the observations during the site inspections, the Contractor has implemented all the relevant environmental mitigation measures as recommended in the Project Profile (Register No. PP-468/2012).
- 5.1.1 Referring to the information provided by the Contractor, no complaint, notification of summons and successful prosecution was received in the reporting month.

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Appendix A

Location Plan of Key Project Components (2017 Scheme)



Source: Environmental Review Report of "Enhanced Ash Utilisation and Water Management Facilities at castle Peak Power Station", January 2018, Castle Peak Power Company Limited

Appendix B

Construction Programme

J9589_Construction of Ash Silo and the Associated E&M Plants & Equipment for Ash Handling (Master Programme Rev. 3 - September 2019)

	YEE HOP ENGINEERING CO., LID.	0	pro	m. c													
ID	Task Name	Start	Finish	% Comp.	Feb Mar	Apr May	2019 Jun Jul Au	Sep Oct	Nov De	e Jan	Feb Mar	Apr Ma	20 ay Jun	Jul Au	ıg Sep	Oct Nov	Dec
1	Contract Project	TI. 140/10	E.: 1/1/01	150	M1 M2	M3 M4	Jun Jul Aug M5 M6 M7	M8 M9	M10 M1	1 M12	M13 M14	M15 M1	16 M17	M18 M1	9 M20	M21 M22	M23
2	Contract Period	Thu 14/2/19	Fri 1/1/21	15%					11 1		1	1 1			1		
3	Dite I constituti	Thu 14/2/19	Thu 14/2/19		♦ 14/2										1 1	1	1
4	Design Suchristich und Statuter Trequirements	Tue 12/3/19	Thu 6/8/20					1	11		1				1 1	1	1
	Demolition Works Submission	Tue 12/3/19	Fri 10/5/19				1 1	i i		1 1	į.	1 1	1 1		1 1	i	i i
5	Design Submission of Demontron Americanent (if any)	Tue 12/3/19	Wed 10/4/19			—		i i	11 11	1 1		1 1					1 1
6	BB Tipple of the Consent for Bellionation Works	Thu 11/4/19	Fri 10/5/19						11						1 1		1
7	Foundation & Superstructure Works Submission	Sat 11/5/19	Thu 6/8/20						11 1	1 1					1 1		1
8	BB consent for realization works	Sat 11/5/19	Fri 7/6/19			i i		+ + -	11	1	-	1			1 1	- 1	I I
9	BB consent for superstructure of other	Fri 10/7/20	Thu 6/8/20						11 1	1 1	1	1 1		-	1 1	- }	1
0		Thu 14/2/19	Mon 30/9/19			1 1	1 1		11 1	1 1	1	1 1			1 1		1
1		Thu 14/2/19	Wed 20/2/19				1	1	11 1	1 1	1				1 1		
2		Thu 14/2/19	Wed 27/2/19	100%			1 1	1 1		1 1	1				1 1		1
3		Thu 14/2/19	Wed 27/2/19	100%		1 1 11		1 1	11 11	1 1	ĺ	1 1			1 1		Î
4		Thu 14/2/19	Wed 20/2/19	100%	Ĭ.		i i	1 1	11 11	1 1	į.				1 1		1
5	Installation of monitoring Instrument	Thu 21/2/19	Wed 6/3/19	100%			1 1			1 1			1 1				
6	Plant Mobilization	Thu 28/2/19	Wed 6/3/19								1						
7		Thu 7/3/19	Wed 20/3/19					-		1 1	ŀ	1 1			1 1		1
3		Thu 14/3/19	Mon 30/9/19						11 11	1 1	1	1 6	1 1		1 1	- 1	
)	Demolition of existing conveyor belts and associated supporting frames down to existing ground level	Thu 21/3/19	Wed 10/4/19					+ +	11 11	1 1	1	1			1 1		1
)		Thu 28/3/19	Wed 10/4/19		1 2		9 1	1 1	11 11	1 1	1	1 6	1 1		1 1		1
		Thu 11/4/19	Wed 24/4/19			× .		1	11 11	1 1	1	1			1 1	1	
		Thu 25/4/19	Mon 4/5/20						77 7	1 1						1	1
		Thu 25/4/19	Fri 21/2/20				ii	i i			_		1 1				
1						¥	1 1	1 1	11 1		•						
		Thu 25/4/19	Sat 25/5/19			7	1 1	1 1	11 1	1 1					1 1		1 1
,	Demontion of Appendages	Sun 26/5/19	Sat 1/6/19					+	11 1	1 1	-	1 1			1		I I
		Mon 2/9/19	Sun 15/9/19				1		111	1 1	-	1 1			1 1		1
	2 emention of one of repper	Tue 12/11/19	Tue 19/11/19			1 1		1	1	1 1	1				1 1		1
8	Demonstration of other purporting Frame	Wed 20/11/19	Tue 10/12/19			1 1		1		_	1				1 1		1
9	~ 1110 mm v 2110 mg v v v mg v	Fri 13/12/19	Wed 25/12/19			1 1		1		8 1		1 1			1 1		1
80	Demondon of Asia Sho Az	Fri 13/12/19	Mon 4/5/20			1 1										i	
1	Teme the of the december of the other	Wed 9/10/19	Wed 9/10/19					→ 9/	10	1 1							1 1
2	2 emergen er i ippenangen	Fri 13/12/19	Thu 19/12/19				1 1			Ti i			1 1				1
3		Fri 20/12/19	Fri 27/12/19			1 1			11 1 1				1 1				1 1
4	a contract of the French Contract of the Fren	Sat 28/12/19	Fri 24/1/20						11 1			1 1					1 1
5		Sat 25/1/20	Fri 14/2/20				1 1	1 1							1 1	- 1	
5		Sat 15/2/20	Fri 28/2/20			1 1	1 1		11 1	1 1					1 1		1 1
7		Sat 29/2/20	Fri 3/4/20	0%				1		1 1		*		1 1	1 1		1 1
3	Milestone 1 (305 days from Contract Commencement)	Sun 15/12/19	Sun 15/12/19	0%		1	F 1	1	1	15/12	1	1 1			1 5		E E
9		Sun 5/1/20	Fri 1/1/21	0%		1 1		1	11 1						$\overline{}$	\rightarrow	$\overline{}$
)		Mon 2/3/20	Sun 4/10/20	0%	. 1	1 1		1 1		1 1	-			_	$\overline{}$		1
	Excavate to Formation Level of Raft Footing	Sat 4/4/20	Fri 17/4/20	0%	. 1	1 1	1 1	į į		1 1	į	The last			1 1	į	1 1
2	Carry out Plate Load Test	Sat 18/4/20	Thu 7/5/20			1 1		1 1		1 1	ĺ		. [1 1		
	Cast Blinding Layer	Fri 8/5/20	Thu 14/5/20					į į	11 1	1 1	ĺ	T.					
	Erection of Formwork and Rebar Fixing	Fri 15/5/20	Thu 11/6/20								- 1	1			_		
	Concreting for Raft Footing	Fri 12/6/20	Thu 2/7/20							1 1	1		¥	h			
		Fri 3/7/20	Thu 6/8/20				1 1		11 1	1 1	1	1		*			
		Thu 6/8/20	Thu 6/8/20			1 1	1	1 1	11 1	1 1	1	1 6	1 1	*	5/8	- 1	
		Sun 5/1/20	Fri 1/1/21	0%		1	1 1			_				1			
		Sun 30/8/20	Sat 28/11/20				1	1	11	1	1	1 1	1 1		+		
		Sun 5/1/20	Fri 3/7/20					1 1	11 1		i	ī	i li	4]]
													6		1		
	On-she preparation works for subsequent installation of Sho & Hopper	Fri 3/7/20	Thu 6/8/20	0%					11 1		j	1	,				i i
	Erection of Steel Supporting Frame & Staircases	Fri 7/8/20	Sun 20/9/20	0%					11		i			_			II II
	Installation of Silo & Hopper	Mon 21/9/20	Mon 26/10/20			1 1	1	1 1		1 1	1	1 1					1
	Allow Others for Installation of E&M	Mon 28/9/20	Wed 11/11/20			1	1	1 1		1 1	1	1 1			N		į.
		Tue 27/10/20	Fri 13/11/20			1 1		1	11 1	1 1	1	I I				×	I.
		Sat 14/11/20	Fri 27/11/20					1 1	11 1	1 1	į	1 1		į į	1 1		84
		Sat 14/11/20 Sat 28/11/20	Sun 27/12/20					1 1	11 1	1 1	į	1 1		į į	1 1		1
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9	Incomment of Thermitell Careering	Sat 28/11/20	Fri 11/12/20					1 1		1 1	1	1 1				1	*
)		Sat 28/11/20 Sun 13/12/20	Sat 12/12/20	0% 0%		1 1	1 1		11		1	1 1			1 1		
	Removal of Metal Scattolding & Site Clearance	Sun 13/12/20	Fri 1/1/21	(10%			0.00	1 1	1.6	1 1	- 1	1 6	1 1				1 200000000

Appendix C Environmental Audit Records



Control Inspection Date: Time: PART Weath	ract no:	Clied ER: IEC: Con		Alex	Chan Chun Long		
PART	B: SITE AUDIT				-		
		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1.01	on 1: Water Quality Is wetting of materials and surfaces avoided excess use of water?		Н				
1.02	Are channels, earth bunds or sand bag barriers provided on-site to properly direct stormwater to desilting facilities?						
1.03	Are existing on-site silt removal facilities, channels and manholes, if any, maintained and the deposited silt and grit removed regularly, at the onset of and after each rainstorm and to ensure that these facilities are functioning properly at all times?	ď					
1.04	Are other manholes, if any, including any newly constructed ones adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system?		\Box				
1.05	Are open stockpiles of materials on site avoided or where unavoidable covered with tarpaulin or similar fabric during rainstorm? Are measures taken to prevent the washing away of construction materials, soil, silt or debris?						
1.06	Is sewage arising from the construction workers on-site collected by temporary sanitary facilities where necessary, e.g. portable chemical toilets? Are portable toilets used coupled with tankering away services provided by a reputable collector?						
1.07	Are all site drainages comply with the terms and conditions of a valid discharge licence issued by EPD?	\Box					
1.08	Are vehicle washing facilities drained into desilting facilities before discharge? Is water recycled on-site wherever possible? Is the wash water from wheel wash basins either reused for site watering or pumped to the on-site desilting facilities for treatment?	ď					
1.09	Are desilting facilities checked and the deposited silt and grit removed regularly to ensure that they are working properly at all times?	\square					
1.10	Are all fuel tanks and chemical storage sited on sealed and bunded areas and provided with locks?		\square				
1.11	Are storage areas surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent accidental spillage, if necessary?		\Box				
1.12	Are oil and grease removal facilities provided where appropriate, e.g. in area near plant workshop/maintenance area, if any?						
1.13	Is chemical waste arising from the site properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal (Chemical Waste) (General) Regulation?	\not					



		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Sectio	n 2: Air Quality						
2.01	Are all areas involving site clearance and excavation works sprayed with water before, during and after the operations to maintain the entire surface wet?		\Box				
2.02	Are materials dropped from restricting heights as far as practicable to minimize the fugitive dust arising from loading/unloading?						
2.03	Is hoarding of not less than 2.4m high from ground level along the major work site boundary erected, for the new process water tank and the new PFA storage silo, where appropriate?						
2.04	Are all vehicles washed to remove any dusty materials from the bodies and wheels immediately before leaving a work site?						
2.05	Is the load of the vehicle leaving a work site is carrying a load of dusty materials covered entirely by clean impervious sheeting to ensure that the dusty materials will not be released from the vehicle?						
2.06	Is stockpile of dusty materials on-site covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides?						
2.07	Is stockpile of dusty materials on-site sprayed with water immediately prior to any loading, unloading or transfer operation to dampen the dusty materials?		₫				
2.08	Is the travelling speed of vehicles within the work sites controlled to within 10 km/h to reduce the traffic induced dusty dispersion and re-suspension?		Ø				
2.09	Is unpaved haul road sprayed with water to maintain the entire road surface wet?						
2.10	Is coal dust suppressed by water sprays using the spray guns and water browser as existing normal operations at the coal stockyard during the clearance of the coal pile?		₫				
Section	n 3: Noise		1				
3.01	Is unused equipment turned off?		\Box				
3.02	Is PME kept to a minimum and the parallel use of noisy equipment / machinery avoided?		Þ				
3.03	Are all plant and equipment maintained regularly?		位				
3.04	Are material stockpiles and other on-site structures effectively used as noise barriers, where practicable?						
3.05	Are purpose-built movable noise barrier, silencer and quiet plant used as necessary?						
Section	n 4: Waste/Chemical Management		,				
4.01	Is reuse / recycling of all materials on-site investigated and exhausted prior to treatment / disposal off-site?						
4.02	Are all waste materials sorted on-site into inert and non-inert C&D materials, and where the materials recycled or reused, are they further segregated?		口				
4.03	Is trip-ticket system implemented in accordance with the contract and the requirements of WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"?		口				
4.04	Is the Contractor registered as a Chemical Waste Producer if chemical wastes are generated on-site?	\Box					
4.05	Are licensed chemical waste collectors employed to collect any chemical waste generated at site?	ഥ					
4.06	Are handling, storage, transportation and disposal of chemical wastes conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and A Guide to the Chemical Waste Control Scheme both published by EPD?		d				
4.07	Are sufficient number of covered bins provided on-site for the containment of general refuse to prevent visual impacts and nuisances? Are these bins emptied daily and the collected waste disposed of to WENT Landfill?						
4.08	Is the site maintained clean and hygienic throughout the project works?		\Box				Page 2 of 3

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.09	Are toolbox talks provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling?						
Section	n 5: Others (in according to the EP)						
5.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits or at a convenient location for public's information at all times??						

Remarks:

No specific observation was identified in this inspection.

Client ER IEC Contractor

(Alex Chan) So Chun Long



Environmental Audit Checklist Enhanced Ash Utilisation and Water Management Facilities at Project: the Castle Peak Power Station (CPPS) Inspected by Contract no: Client: Yee Hop Engineering Co. LTD Contractor: ER: Inspection IEC: Alex Chan 020 Date: an Contractor: So Chun Long 100 Time: PART A: **GENERAL INFORMATION** Sunny Weather: Fine Cloudy Rainy Temperature: °C Humidity: High Moderate Low Wind: Strong Breeze Light Calm PART B: SITE AUDIT Not Follow Photo/ Yes No N/A Obs. up Remarks Section 1: Water Quality 1.01 Is wetting of materials and surfaces avoided excess use of water? Are channels, earth bunds or sand bag barriers provided on-site to 1.02 properly direct stormwater to desilting facilities? Are existing on-site silt removal facilities, channels and manholes, if any, maintained and the deposited silt and grit removed regularly, at the onset 1.03 of and after each rainstorm and to ensure that these facilities are functioning properly at all times? Are other manholes, if any, including any newly constructed ones adequately covered and temporarily sealed so as to prevent silt, 1.04 construction materials or debris from getting into the drainage system? Are open stockpiles of materials on site avoided or where unavoidable covered with tarpaulin or similar fabric during rainstorm? Are measures 1.05 taken to prevent the washing away of construction materials, soil, silt or debris? Is sewage arising from the construction workers on-site collected by temporary sanitary facilities where necessary, e.g. portable chemical 1.06 toilets? Are portable toilets used coupled with tankering away services provided by a reputable collector? Are all site drainages comply with the terms and conditions of a valid 1.07 discharge licence issued by EPD? Are vehicle washing facilities drained into desilting facilities before discharge? Is water recycled on-site wherever possible? Is the wash water 1.08 from wheel wash basins either reused for site watering or pumped to the on-site desilting facilities for treatment? Are desilting facilities checked and the deposited silt and grit removed 1.09 regularly to ensure that they are working properly at all times? Are all fuel tanks and chemical storage sited on sealed and bunded areas 1.10 and provided with locks? Are storage areas surrounded by bunds with a capacity equal to 110% of 1.11 the storage capacity of the largest tank to prevent accidental spillage, if necessary? Are oil and grease removal facilities provided where appropriate, e.g. in

1.12

1.13

area near plant workshop/maintenance area, if any?

Waste Disposal (Chemical Waste) (General) Regulation?

Is chemical waste arising from the site properly stored, handled, treated

and disposed of in compliance with the requirements stipulated under the



		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section	n 2: Air Quality				3 <u>- 23</u> 8111		
2.01	Are all areas involving site clearance and excavation works sprayed with water before, during and after the operations to maintain the entire surface wet?		\square				
2.02	Are materials dropped from restricting heights as far as practicable to minimize the fugitive dust arising from loading/unloading?		\Box				
2.03	Is hoarding of not less than 2.4m high from ground level along the major work site boundary erected, for the new process water tank and the new PFA storage silo, where appropriate?		\Box				
2.04	Are all vehicles washed to remove any dusty materials from the bodies and wheels immediately before leaving a work site?						-
2.05	Is the load of the vehicle leaving a work site is carrying a load of dusty materials covered entirely by clean impervious sheeting to ensure that the dusty materials will not be released from the vehicle?		\Box				
2.06	Is stockpile of dusty materials on-site covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides?		\Box				
2.07	Is stockpile of dusty materials on-site sprayed with water immediately prior to any loading, unloading or transfer operation to dampen the dusty materials?		6				
2.08	Is the travelling speed of vehicles within the work sites controlled to within 10 km/h to reduce the traffic induced dusty dispersion and re-suspension?		\Box				
2.09	Is unpaved haul road sprayed with water to maintain the entire road surface wet?		\triangle				
2.10	Is coal dust suppressed by water sprays using the spray guns and water browser as existing normal operations at the coal stockyard during the clearance of the coal pile?						
Section	on 3: Noise		,				
3.01	Is unused equipment turned off?						
3.02	Is PME kept to a minimum and the parallel use of noisy equipment / machinery avoided?						
3.03	Are all plant and equipment maintained regularly?						
3.04	Are material stockpiles and other on-site structures effectively used as noise barriers, where practicable?		d				
3.05	Are purpose-built movable noise barrier, silencer and quiet plant used as necessary?						
Secti	on 4: Waste/Chemical Management		/				
4.01	Is reuse / recycling of all materials on-site investigated and exhausted prior to treatment / disposal off-site?						
4.02	Are all waste materials sorted on-site into inert and non-inert C&D materials, and where the materials recycled or reused, are they further segregated?		\Box				
4.03	Is trip-ticket system implemented in accordance with the contract and the requirements of WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"?						
4.04	Is the Contractor registered as a Chemical Waste Producer if chemical wastes are generated on-site?	Ø,					
4.05	Are licensed chemical waste collectors employed to collect any chemical waste generated at site?	\Box					
4.06	Are handling, storage, transportation and disposal of chemical wastes conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and A Guide to the Chemical Waste Control Scheme both published by EPD?		\square				
4.07	Are sufficient number of covered bins provided on-site for the containment of general refuse to prevent visual impacts and nuisances? Are these bins emptied daily and the collected waste disposed of to WENT Landfill?						
4.08	Is the site maintained clean and hygienic throughout the project works?		\Box				Page 2 of 3

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.09	Are toolbox talks provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling?						
Secti 5.01	on 5: Others (in according to the EP) Are relevant Environmental Permits posted at all vehicle site entrances/exits or at a convenient location for public's information at all times??						065 1

Remarks:

Observation

Excavator operated without NRMM was observed.
The contractor was advised to affect the NRMM label on
the PME On site.

Client ER IEC Contractor

(Alex Cham) (Marco Contractor)

Appendix D

Summary of Implementation Status of Environmental Mitigation Measure

Appendix D Implementation Status of Recommended Mitigation Measures during Construction Stage

Environmental Aspect	Recommended Mitigation Measures	Implementation Status
Air Quality	Measures for Construction Activities involving Excavations, Loading and Unloading of Soils	
(Section 4.1 of Project Profile)	 All areas involving site clearance and excavations works will be sprayed with water before, during and after the operations to maintain the entire surface wet; 	Y
	 Restricting heights from which materials are to be dropped, as far as practicable to minimise the fugitive dust arising from unloading/ loading; 	Y
	• Erection of hoarding of not less than 2.4 m high from ground level along the major work site boundary (the new process water tank and the new PFA storage silo), where appropriate;	N/A
	 Immediately before leaving a work site, all vehicles shall be washed to remove any dusty materials from the bodies and wheels. However, wetting of materials and surfaces should avoid excessive use of water; 	Y
	 Where a vehicle leaving a work site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials will not be released from the vehicle; 	Y
	 Any stockpile of dusty materials on-site will be covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides. They should also be sprayed with water immediately prior to any loading, unloading or transfer operation to dampen the dusty materials; 	Y
	• To reduce the traffic induced dust dispersion and re-suspension, the travelling speed of vehicles within the work sites should be controlled to within 10 km/h;	Y
	Any unpaved haul road shall be sprayed with water so as to maintain the entire road surface wet.	N/A
	Measures for Partial Decommissioning of the West Coal Stockyard	
	During the clearance of the coal pile, coal dust will be suppressed by water sprays using the spray guns and water browser as existing normal operations at the coal stockyard.	N/A
Noise	Good Site Practice	
(Section 4.2 of Project Profile)	 Unused equipment should be turned off. PME will be kept to a minimum and the parallel use of noisy equipment/ machinery will be avoided; 	Y
	Regular maintenance of all plant and equipment;	Υ
	Material stockpiles and other on-site structures will be effectively used as noise barriers, where practicable;	N/A
	Use of purpose-built movable noise barrier, silencer and quiet plant as necessary.	N/A

Environmental Aspect	Recommended Mitigation Measures	Implementation Status
Water Quality	Measures for Construction Site Runoff and Discharge	
(Section 4.3 of Project Profile)	 Surface runoff from the affected works areas are to be directed towards desilting facilities before discharging into the stormwater drainage; 	N/A
	 Channels, earth bunds or sand bag barriers will be provided on-site to properly direct stormwater to the above- mentioned facilities; 	Y
	 Existing on-site silt removal facilities, channels and manholes, if any, will be maintained and the deposited silt and grit will be removed regularly, at the onset of and after each rainstorm and to ensure that these facilities are functioning properly at all times; 	N/A
	• Other manholes, if any, including any newly constructed ones will be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system;	Y
	 Open stockpiles of materials on site will be avoided or where unavoidable covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of construction materials, soil, silt or debris; 	Y
	 Sewage arising from the construction workers on-site will be collected by temporary sanitary facilities where necessary e.g. portable chemical toilets. Portable toilets will be used coupled with tankering away services provided by a reputable collector; 	N/A
	 All site discharges will comply with the terms and conditions of a valid discharge licence issued by EPD; 	N/A
	 Vehicle washing facilities will be drained into desilting facilities before discharge. Water will be recycled on-site wherever possible. It is suggested that the wash water from wheel wash basins are either reused for site watering or pumped to the on-site desilting facilities for treatment; 	N/A
	 Desilting facilities will be checked and the deposited silt and grit will be removed regularly to ensure that they are working properly at all times. 	N/A
	Protection against Accidental Spillage	
	 The works may occasionally involve the handling of fuel and generates a small amount of chemical wastes. It must be ensured that all fuel tanks and chemical storage are sited on sealed and bunded areas and provided with locks; 	N/A
	• If necessary, the storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent accidentally spillage;	N/A
	 Oil and grease removal facilities will be provided where appropriate, for example, in area near plant workshop/ maintenance areas, if any; 	N/A
	• Chemical waste arising from the site will be properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal (Chemical Waste) (General) Regulation.	N/A

Environmental Aspect	Recommended Mitigation Measures	Implementation Status
Waste	Waste Management Plan (WMP)	
Management Implications (Section 4.4 of the Project Profile)	The main contractor of the Project shall prepare a <i>Waste Management Plan (WMP)</i> , which will become part of the <i>Environmental Management Plan (EMP)</i> , with reference to the requirements set out in the <i>ETWB TCW No. 19/2005</i> , <i>Waste Management on Construction Sites</i> and the Practice Note for Authorized Persons and Registered Structural Engineers, e.g. <i>Practice Note No. 243 – Construction and Demolition Waste</i> . The WMP shall include monthly Waste Flow Tables (WFT) which indicate the amounts of waste generated, recycled and disposed of (including final disposal site), and it should be updated regularly.	Y
	General waste management measures during Construction	
	• The reuse/recycling of all materials on-site shall be investigated and exhausted prior to treatment/ disposal off-site;	Υ
	 All waste materials shall be sorted on-site into inert and non-inert C&D materials, and where the materials can be recycled or reused, they shall be further segregated. Inert material, or public fill shall be disposed of at Fill Bank at Tuen Mun Area 38 whilst non-inert materials or construction waste shall be disposed of at the WENT Landfill. 	Y
	• The contractor shall be responsible for identifying what materials can be recycled/ reused, whether on-site or off-site. In the event of the latter, the contractor shall arrange for the collection of the recyclable materials.	Y
	• In order to monitor the disposal of public fill and construction waste at public filling facilities and landfills, and control fly-tipping, a trip-ticket system shall be implemented by the Contractor, in accordance with the contract and the requirements of WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material";	Y
	 Under the Waste Disposal (Chemical Waste) (General) Regulation, the Contractor shall register as a Chemical Waste Producer if chemical wastes such as spent lubricants and paints are generated on-site. Only licensed chemical waste collectors shall be employed to collect any chemical waste generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and A Guide to the Chemical Waste Control Scheme both published by EPD; 	N/A
	 A sufficient number of covered bins shall be provided on-site for the containment of general refuse to prevent visual impacts and nuisances. These bins shall be emptied daily and the collected waste disposed of to the WENT Landfill. Further to the issue of ETWB TCW No. 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness, the contractor will be required to maintain a clean and hygienic site throughout the project works; 	Y
	• Toolbox talks should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.	N/A
Land Contamination (Section 4.5 of Project Profile)	Based on the recent SI result, signs of land contamination were not identified and no mitigation measures are considered necessary. However, the situation will be reconfirmed after the SI work at the coal stockyard proposed in the CAP is completed. The SI results will be documented in a Contamination Assessment Report (CAR). If contamination is identified, the necessary remediation method will be proposed and documented in the Remediation Action Plan (RAP) for EPD's approval. If remediation is necessary, the CAPCO will clean up the contaminated land according to the approved RAP, and a Remediation Report (RR) will be prepared to demonstrate that the concerned area(s) have been cleaned up to the	N/A

Environmental Aspect	Recommended Mitigation Measures	Implementation Status
	relevant RBRG's standards. The RR will be submitted to EPD for agreement prior to the commencement of any development or redevelopment works.	
Landscape & Visual (Section 4.7 of Project Profile)	No mitigation measures for landscape and visual impacts are considered necessary, as no adverse landscape and visual impacts are identified during the construction and operation of the Project.	N/A

Notes:

- Y Compliance of Mitigation Measures
 N Non-compliance of Mitigation Measures
 D Deficiency of Mitigation Measures
 N/A Not Applicable in Reporting Period

- Non-compliance of Mitigation Measures but rectified by the Contractor
- Deficiency of Mitigation Measures but rectified by the Contractor