

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

Monthly Audit Report for October 2022

November 2022

AECOM ASIA CO. LTD.

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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. Yee Hop Engineering Company Limited is the Contractor for construction of Ash Silo, while Guangxi Electric Power Design Institute Company Limited is the Contractor for the enhancement works of Water Management Facilities. The civil construction works of Ash Silo were completed by Yee Hop in December 2021. The construction of Ash Silo was handed over to Kum Shing E&M Limited for the E&M works in January 2022. The E&M works undertaken by Kum Shing E&M Limited were substantially completed in April 2022 and only some minor E&M works were remained that significant environmental impacts arising from these works would not be anticipated. Hence, the audit works for Ash Silo site has been terminated since May 2022.

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 Thirty-sixth Monthly Audit Report which summarises the audit findings for the Project during the reporting period from 1 to 31 October 2022.

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 of the Project undertaken in the reporting month includes:

Water Management Facilities Enhancement Works

- (i) Plant Room
 - EVA road work; and
 - Dirty water commissioning work.
- (ii) Process Water Tank
 - No construction activities in reporting month
- (iii) Water Management Facilities
 - Sea-bank road DN 900 pipe support work
 - Pump & piping installation work;
 - · Electrical Work of all pump and instrument; and
 - DN450/250 pipe support work
- (iv) West Coal Store
 - no construction activities in reporting month
- (v) Drainage Modification Works
 - Electrical work for pump motor and instrument;
 - Scrapper-strainer piping system installation work; and
 - Scrapper-strainer system cable work.
- 2.2.2 The major construction activities for the coming month includes:

Water Management Facilities Enhancement Works

- (i) Plant Room
 - EVA road work;
 - Plant room inside ground painting work; and
 - Dirty water commissioning work.
- (ii) Process Water Tank
 - No planned construction activities
- (iii) Water Management Facilities
 - Sea-bank road DN 900 pipe support work;
 - DN450/250 pipe support work; and
 - Pumping system commissioning work.
- (iv) West Coal Store
 - No planned construction activities
- (v) Drainage modification works
 - Scrapper-strainer system commissioning work.

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- 2.2.3 The construction programmes for the above-mentioned construction / enhancement works 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 **Tables 2.1** and **2.2**.

Table 2.1 Status of Environmental Licences, Notifications and Permits for Ash Silo Construction Works

| Permit / Licence No. / Notification/ Reference | Valid F | Period | Status | Remarks |
|---|--------------------|----------------|------------------|---------|
| No. | From | т То | | |
| Environmental Permit | | | | |
| 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 L | Dust) Regulation | |
| 444243 | 15 April 2019 | | Valid | |

Table 2.2 Status of Environmental Licences, Notifications and Permits for Water Management Facilities Enhancement Works

| Permit / Licence No. / Notification/ Reference | Valid F | Period | Status | Remarks |
|---|------------------------|---------------------|----------------------|--|
| No. | From | То | | |
| Environmental Permit | | | | |
| EP-441/2012/A | 29 June 2018 | | Valid | |
| | | | | |
| Billing Account for Cons | | Disposal | | |
| 7037396 | 27 May 2020 | | Valid | _ |
| Notification Under Air Po | ollution Control (| Construction Du | l Ist) Regulation | |
| 455899 | 7 May 2020 | | Valid | |
| | | | | |
| Notification of Commend | cement of Asbes | tos Abatement V | Vork | |
| AX200323 | 14 July 2020 | | closed | All asbestos removal works was finished in October 2020 and the Completion Report of Asbestos Abatement Work (AAW) was sent to EPD on 14 December 2020 for record. |
| Construction Noise Perr | | | | |
| Construction Noise Peri | nit | 21 January | | |
| GW-RW0337-20 | 30 July 2020 | 21 January 2021 | Expired | |
| GW-RW0593-20 | 22 January 2021 | 21 July 2021 | Expired | |
| GW-RW0247-21 | 22 July 2021 | 21 January 2022 | Expired | |
| GW-RW0009-22 | 22 January 2022 | 21 July 2022 | Expired | No further works in restricted hours is required for remaining tasks. No renewal of CNP is required. |
| Discharge Licence | | | | |
| WT0036990-2020 | 12 November 2020 | 30 November 2025 | 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 inspections were carried out jointly with the Contractor on 7 and 21 of October 2022. No non-compliance was recorded during the site inspections. Findings and recommendations for the site inspections are summarised below. Details of observations recorded during the site inspections are presented in **Appendix C**.

Water Management facilities Enhancement Works

- 7 October 2000
 - Piling conducted without dust control measures was observed. The Contractor was advised to provide watering to the dusty work conducted onsite.
- 21 October 2022
 - No specific observation was identified in this inspection.
- 3.1.3 The outstanding follow-up action of the Contractor for preventing soil from leaving the site has been fixed. No further soil has been observed at the vehicle exit during site inspections of this reporting month.

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**.

5 CONCLUSION

- 5.1.1 Two environmental site inspections were carried out for the Project in the reporting month of October 2022. 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

Appendix B Tentative Schedule for the Water Management Facilities Enhancement Works

| Milestone | Works Description | Dates | Duration |
|-----------|--|--|------------------------------------|
| 1 | Commencement of Contract | 12 March 2020 | N/A |
| 2a | Construction of Plant House of Process Water Recycling Facility | By 458 days from commencement of Contract (13 June 2021) | 458 days (15 months approx.) |
| 2b | T&C Works of Process Water Recycling Facility | By 641 days from commencement of Contract (13 December 2021) | 641 days (21 months approx.) |
| 3a | Construction of Process Water Tank | By 458 days from commencement of Contract (13 June 2021) | 458 days (15 months approx.) |
| 3b | T&C Works of Process Water Tank | By 641 days from commencement of Contract (13 December 2021) | 641 days (21 months approx.) |
| 4a | Construction of FS Water Tank and T&C Works of FS Water Tank | By 337 days from commencement of Contract (12 February 2021) | 337 days (11 months approx.) |
| 4b | Construction of Modified Fire Service System for CPA | By 641 days from commencement of Contract (13 December 2021) | 641 days (21 months approx.) |
| 5a | Construction of Storm/ Process Water Management Facilities | By 337 days from commencement of Contract (12 February 2021) | 337 days (11 months approx.) |
| 5b | T&C Works of Storm/ Process Water Management Facilities | By 397 days from commencement of Contract (13 April 2021) | 397 days (13 months approx.) |
| 6 | Handing over of the West Coal Store to the Contractor for construction | By 307 days from commencement of Contract (13 January 2021) | 307 days (10 months approx.) |
| 7 | Works related to Partial Decommissioning of West Coal Store | By 641 days from commencement of Contract (13 December 2021) | 641 days (21 months approx.) |
| 8 | Drainage Modification Works including the necessary T&C Works | By 458 days from commencement of Contract (13 June 2021) | 458 days (15 months approx.) |
| 9 | Completion of All Related Works | By 458 days from commencement of Contract (13 June 2021) | 458 days (15 months approx.) |
| 10 | Completion of all Contract works | By 641 days from commencement of Contract (13 December 2021) | 641 days (21 months approx.) |

Appendix C Environmental Audit Records



| Contr Inspe Date: Time: | A: GENERAL INFORMATION Der: Sunny Fine Cloudy Rain Berature: 33.4 °C High Moderate Low Strong Breeze Light Calm | Clie ER: IEC: Con | | | c Chan ou Fang | | |
|----------------------------------|---|----------------------------|---|----|---------------------------|-----|---------|
| TANT | | Not | Yes | No | Follow | N/A | Photo/ |
| Section | on 1: Water Quality | Obs. | | | ир | | Remarks |
| 1.01 | Is wetting of materials and surfaces avoided excess use of water? | | Ø, | | | | |
| 1.02 | Are channels, earth bunds or sand bag barriers provided on-site to properly direct stormwater to desilting facilities? | | V | | | | |
| 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? | | V | | | | |
| 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? | | v | | | | |
| 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? | | V | | | | |
| 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? | | d | | | | |
| 1.07 | Are all site drainages comply with the terms and conditions of a valid discharge licence issued by EPD? | | V | | | | |
| 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? | | V | | | | |
| 1.09 | Are desilting facilities checked and the deposited silt and grit removed regularly to ensure that they are working properly at all times? | | V | | | | |
| 1.10 | Are all fuel tanks and chemical storage sited on sealed and bunded areas and provided with locks? | | V | | | | |
| 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? | | | | | | |
| 1.12 | Are oil and grease removal facilities provided where appropriate, e.g. in area near plant workshop/maintenance area, if any? | | Image: section of the content of the | | | | |
| 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 Obs. | Yes | No | Follow up | N/A | Photo/ Remarks |
|---------|--|-------------|------|----|--------------|-----|-------------------|
| Section | on 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? | | | | | | observation |
| 2.02 | Are materials dropped from restricting heights as far as practicable to minimize the fugitive dust arising from loading/unloading? | | ď | | | | |
| 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? | | v | | | | |
| 2.04 | Are all vehicles washed to remove any dusty materials from the bodies and wheels immediately before leaving a work site? | | V | | | | |
| 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? | | Ø | | | | |
| 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? | | V | | | | |
| 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? | | Ø, | | | | |
| 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? | | V | | | | |
| Section | on 3: Noise | | / | | | | |
| 3.01 | Is unused equipment turned off? | | V, | | | | |
| 3.02 | Is PME kept to a minimum and the parallel use of noisy equipment / machinery avoided? | | v | | | | |
| 3.03 | Are all plant and equipment maintained regularly? | | V, | | | | - |
| 3.04 | Are material stockpiles and other on-site structures effectively used as noise barriers, where practicable? | | Ø, | | | | |
| 3.05 | Are purpose-built movable noise barrier, silencer and quiet plant used as necessary? | | V | | | | - |
| Section | on 4: Waste/Chemical Management | | / | | | | |
| 4.01 | Is reuse / recycling of all materials on-site investigated and exhausted prior to treatment / disposal off-site? | | Ø | | | | |
| 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? | | | | | | |
| 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"? | | abla | | | | |
| 4.04 | Is the Contractor registered as a Chemical Waste Producer if chemical wastes are generated on-site? | | V/ | | | | |
| 4.05 | Are licensed chemical waste collectors employed to collect any chemical waste generated at site? | | V | | | | |
| 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? | | V | | | | |
| 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? | | Ø/ | | | | |
| 4.08 | Is the site maintained clean and hygienic throughout the project works? | | V | | | | 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? | | Ø | | | | |
| Section | n 5: Others | | | | | | |
| 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?? | | \square | | | | |
| 5.02 | Others: | | | | | <u></u> | |

Remarks:

O bservation

Piling conducted without dust control measure was was observed. File Contractor was advised to Provide to Provide Watering to the dusty work conducted onsite.

Client ER IEC Contractor

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Environmental Audit Checklist Enhanced Ash Utilisation and Water Management Facilities at the Castle Peak Power Station (CPPS) Inspected by Project: Client: Contract no: Guangxi Electric Power Design Institute Co., Ltd FR: Contractor: IEC: Alex Chan Inspection October Date: Contractor: Lu You Fang Time: **GENERAL INFORMATION** PART A: Weather: Sunny Fine Cloudy Rainy 29.5 Temperature: Humidity: High Moderate Wind: Strong Breeze Calm PART B: SITE AUDIT Not Follow Photo/ No Yes N/A Obs Remarks up Section 1: Water Quality Is wetting of materials and surfaces avoided excess use of water? 1.01 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 1.04 adequately covered and temporarily sealed so as to prevent silt, 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 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 area near plant workshop/maintenance area, if any? 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?

1.13



| | | Not Obs. | Yes | No | Follow up | N/A | Photo/ Remarks |
|---------|--|-------------|--------------|----|--------------|-----|-------------------|
| Section | 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? | | | | | | |
| 2.02 | Are materials dropped from restricting heights as far as practicable to minimize the fugitive dust arising from loading/unloading? | | V | | | | |
| 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? | | \square | | | | |
| 2.04 | Are all vehicles washed to remove any dusty materials from the bodies and wheels immediately before leaving a work site? | | V | | | | |
| 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? | | Q | | | | |
| 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? | | | | | | |
| 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 | | / | | | | |
| 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? | | \(\sigma\) | | | | |
| 3.05 | Are purpose-built movable noise barrier, silencer and quiet plant used as necessary? | | \checkmark | | | | |
| 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? | | V | | | | |
| 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? | | | | | | |
| 4.05 | Are licensed chemical waste collectors employed to collect any chemical waste generated at site? | | V | | | | |
| 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? | | $\sqrt{}$ | | | | |
| 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? | | V | | | | 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? | | V | | | | |
| Sectio | n 5: Others | | | | | | |
| 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?? | | V | | | | |
| 5.02 | Others: | | | | | | |

Remarks:

| N o | specific | obser va tion | Was | identified | ih |
|------|-------------|---------------|-----|------------|----|
| this | inspection. | | | | |

Client ER IEC Contractor

(Alex Chan)

(PART)

Appendix D

Summary of Implementation Status of Environmental Mitigation Measure

Appendix D Implementation Status of Recommended Mitigation Measures during Construction Stage - Water Management Facilities Enhancement Works

| 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; | <u> </u> |
| | 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; | Y |
| | • 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; | D - <u>Y</u> |
| | 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. | Y |
| | 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 (Section 4.3 of Project Profile) | Measures for Construction Site Runoff and Discharge | |
| | Surface runoff from the affected works areas are to be directed towards desilting facilities before discharging into the stormwater drainage; | Y |
| | 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; | Y |
| | • 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; | N/A |
| | • 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; | Y |
| | 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; | Y |
| | • 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. | Y |
| | 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; | Y |
| | • 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; | Y |
| | • 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. | Y |

| 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; | Y |
| | 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; | Y |
| | 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