271753/L022/FC/cf



By Registered Mail

Director,

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10 June 2022

Dear Sirs

Agreement No EP-563/2018
The Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development
IEC Monthly Audit Report No. 20

In accordance with the Clause 2.1 of EP-563/2018 for The Development of AFCD Animal Management and Animal Welfare Building, we are pleased to submit herewith one hard copy and one softcopy in HTML and PDF version of the Monthly Audit Report No.20 (1 – 31 May 2022) for your attention.

Should you have any queries, please do not hesitate to contact the undersigned.

Yours faithfully

Franki Chiu

Independent Environmental Checker

ranki Chin

Enc

one hard copy without CD – Ms Amy Tan, ArchSD

One hard copy without CD - Mr Matthew Tang, EPD

One hard copy without CD - Ms Wendy Sin, SKA

Architectural Services Department

The Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development

Monthly Audit Report No. 20 (1-31 May 2022)

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 271753

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Appendices

Appendix 1 IEC Site Audit Checklist

1 INTRODUCTION

1.1 Background

The Environmental Permit (EP) (i.e. EP-563/2018) for Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development (hereinafter referred to as the Project) was issued on 10th August 2018. After the issuance of the EP, AFCD proposed refinements to the design of the Project which are referenced in the Pre-Construction Audit Report.

In accordance with Clause 2.1 of the EP, the Permit Holder shall, no later than 3 months before the commencement of construction of the Project or otherwise, deposit with the Director of Environmental Protection (DEP) of a Pre-construction Audit Report to confirm the design measures stipulated in the Project Profile (PP) (i.e. PP-569/2018), including the location of the entrance and exits, the open-air exercise areas for animals, and the air exhausts of the ventilation system of the animal keeping areas have been fully incorporated into the relevant design drawings. The said Pre-construction Audit Report was submitted to EPD and approved on 19 Mar 2020.

Arup was commissioned by ArchSD to provide Independent Environmental Checker services. The scope of the project is as follows:

(1) An animal management and animal welfare building complex, which mainly covers a quarantine centre, a veterinary testing laboratory and offices.

Figure 1 shows the Project location plan in the environmental permit EP-563/2018. **Figure 2** shows the management structure for environmental works of the Project.

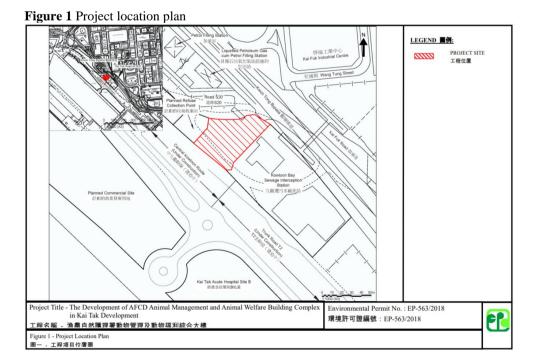
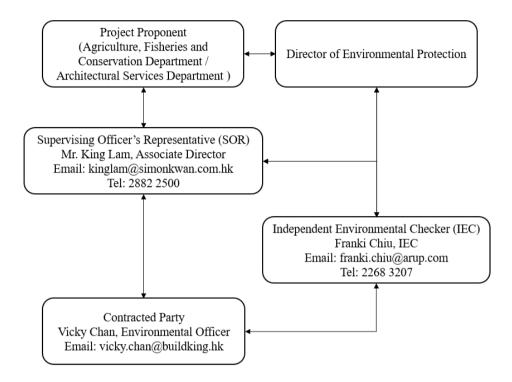


Figure 2: Management structure

Animal Management And Animal Welfare Building Complex Project Organization Environmental Works



1.2 Scope of the Assignment

The objective of this Project is to verify that the construction phase environmental mitigation measures stipulated in the Project Profile (Register No.: PP-569/2018) are fully implemented, and to provide all professional services of necessary technical support, professional advices, studies, coordination, verification of Contractor's submissions, and preparation of submission to EPD, etc. to ensure compliance with the EP in accordance with the PP and the study brief as follows:

- (a) Coordinate with Simon Kwan & Associates Ltd (SKA), Allied Environmental Consultants Limited (AEC) and the Contractor to check and ensure compliance with the PP and EP;
- (b) Coordinate with SKA, AEC and the Contractor and prepare all the submissions to EPD as required under EP-563/2018;
- (c) Submit Audit Reports to EPD as required under EP-563/2018;
- (d) Fulfil all duties as IEC as required by EPD under the EIAO, including, but not limited to, the verification of all relevant reports prepared by the Contractor in the course of construction; and
- (e) Attend regular & ad-hoc project meetings and environmental meetings when required.

2 Concise Overview of Assignment Period

The contract commenced on the 25th September 2020 and the site activities carried out by the Contractor in this reporting month include:

- Excavation and Lateral Supporting (ELS) Works
- Concreting Works
- Rebar Fixing Works
- Formwork Erection Works

The environmental performance was considered acceptable during the assignment period from 1st May 2022 to 31st May 2022.

2.1 Construction phase environmental mitigation implementation status

The environmental mitigating measures to be implemented according to the approved Project Profile during the construction phase is subject to the site activities programme. The status in this reporting month is summarised in **Table 2.1**

Table 2.1: Implementation status of construction phase environmental protection measures

| | Mitigation Measures | Status |
|-----|--|-------------|
| | Demolition activities should be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the activities to maintain the entire surface wet. | Implemented |
| | Dusty excavated material should be entirely covered by impervious sheeting or sprayed with water to maintain the entire surface wet. | Implemented |
| | Dusty excavated material should be removed, backfilled or reinstated where practicable within 24 hours of the excavation or unloading. | Implemented |
| Air | Hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing during any open excavation and reinstatement works. Good practice should also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; | Implemented |
| | Dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads or streets. | Implemented |
| | Dump truck loaded with dusty material should be covered entirely by impervious sheeting | Implemented |
| | Vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. | Implemented |
| | The area where vehicle washing takes place and the road section between the washing facilities and the exit point | Implemented |

| | Mitigation Measures | Status |
|------------------|---|---|
| | should be paved with concrete, bituminous materials or hardcore. | |
| | Road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials. | Implemented |
| | Effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building; a canopy should be provided from the first-floor level up to the highest level of the scaffolding as an alternative. | To be implemented, no scaffolding in the current construction phase. |
| | Skip hoist for material transport should be enclosed entirely by impervious sheeting. | To be implemented, no skip hoist in the current construction phase. |
| | Use of Powered Mechanical Equipment (PME), parallel operation and unnecessary idling in the open areas of the Project site should be limited to a minimum. | Implemented |
| | Movable and temporary noise barrier and enclosure should be provided for any operating PME. | Implemented |
| Noise | Noisy construction process should be scheduled outside school examination periods. | To be implemented, currently outside school examination periods. |
| | Use of quiet plant associated with the construction works as prescribed in British Standard "Noise Control on Construction and Open Sites, BS5228: Part 1: 2009" | Implemented |
| | Full compliance of "Recommended Pollution Control Clauses" under the Construction Contract. | Implemented |
| er. | Full compliance of Pro PECC Note 1/94 "Construction Site Drainage" | Implemented |
| Water | Surface run-off and sewage effluent should be discharged into sewerage system | Implemented in surface run- off, chemical toilets are adopted. |
| | General housekeeping should be practiced regularly. | Implemented |
| | C&D materials should be reused on-site | Implemented |
| | Trip ticket system should be implemented and available for checking in accordance with the DEVB TCW No. 6/2010 "Trip Ticket System for Disposal of Construction and Demolition Material." | Implemented |
| Waste Management | Inert C&D waste and non-inert C&D waste should be properly sorted and disposed of at appropriate facilities in accordance with the Waste Disposal (Charges for Disposal of Construction Waste Regulation (Cap. 354N). | Implemented |
| | The Contractor is required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes" | Implemented |
| 5 | Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. | Implemented |
| | Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. | Implemented |

| | Mitigation Measures | Status |
|-------------|--|---|
| | Chemical waste should be collected by the licensed chemical waste collector for transportation and disposal at the approved Chemical Waste Treatment Centre or | To be implemented, no chemical waste was transferred to a disposal |
| | other licensed treatment facilities, according to the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). | facility according to Contractor's progress report for this reporting month |
| | General refuse should be temporarily stored in enclosed bins or compaction units and removed from the site on a regular basis. | Implemented |
| | Licensed waste collectors should be employed to remove refuse from the site for disposal. | N/A (Contractor will conduct general refuse removal.) |
| | A dedicated access route should be used for construction vehicles. | Implemented |
| g. | Any lifting operation over the site boundary should be strictly minimised. | Implemented |
| Life hazard | Any lifting (if any) should be assessed, controlled and closely supervised by Contractors and qualified operation staff. | Implemented |
| 7 | Ignition sources should be confined within the site. | Implemented |
| | Work permit system for hot work activities within the Project site should be specified in the contractor's method statement | Implemented |
| ape | Temporary stockpile of excavated and building materials should be covered. | Implemented |
| Landscape | Hoardings with outlook matching with surrounding landscape should be erected. | Implemented |
| I | Any night-time glaring should be minimised. | Implemented |

2.2 Summary of valid Environmental Licenses, Permits and Notifications

Summary of valid licenses, permits and/or notifications on environmental protection for the Project as extracted from the Contractor's progress report for this reporting month is given in **Table 2.2**.

Table 2.2: Summary of valid licenses, permits and/or notifications on environmental protection

| License / Notification | Ref. / Account No. / Waste Producer No. | Received Date | Expiry Date |
|---|--|---------------|------------------------|
| Notification Pursuant to Section 3(1) of the Air Pollution Control (Construction Dust) Regulation | Ref. No. 459968 | 14 Sep 2020 | Construction Period |
| Wastewater Discharge License | WT00037298-2020 | 28 Jan 2021 | 31 Jan 2026 |
| Construction Waste Disposal Charging Scheme | 7038488 | 28 Sep 2020 | Construction Period |
| Chemical Waste Producer License | Waste Producer No. 8334-286-B2491-07 | 23 Oct 2020 | Construction Period |
| Construction Noise Permit for | PP - RE0034-20 | 28 Sep 2020 | 13 Apr 2021 |
| Percussive Piling | PP – RE0005-21 | 05 Mar 2021 | 13 Oct 2021 |
| 1 creussive 1 ming | PP – RE0030-21 | 23 Sep 2021 | 14 Apr 2022 |
| | GW - RE0835-20 | 05 Oct 2020 | 20 Mar 2021 |
| Construction Noise Permit for | GW - RE0144-21 | 19 Feb 2021 | 20 Sep 2021 |
| General Construction Work | GW - RE0843-21 | 06 Sep 2021 | 20 Mar 2022 |
| | GW – RE0181-22 | 04 Mar 2021 | 20 Sep 2022 |

2.3 Environmental Complaint, Summons and Prosecution

Summary of environmental complaint, summons and prosecution for the Project as extracted from the Contractor's progress report for this reporting month is given in **Table 2.3**.

Table 2.3 Summary of environmental complaint, summons and prosecution

| Description | During this reporting month | Cumulative total |
|--|-----------------------------|------------------|
| Public Complaint on environmental issues: (Including light nuisance complaint) | 0 | 0 |
| Offences spotted by EPD during inspection | 0 | 0 |
| Abatement Notices issued by EPD | 0 | 0 |
| Notification referred by EPD | 0 | 0 |

2.4 Tentative Construction Activities in the Coming Two Months

Summary of forthcoming construction activities in the next two months and their corresponding potential environmental impacts and nuisance as extracted from the Contractor's progress report for this reporting month is given in **Table 2.4**.

Table 2.4 Construction activities and potential environmental impacts in the coming 2 months

| Construction Activities | Environmental Impacts & Nuisance |
|--|--|
| Excavation and Lateral Supporting (ELS) Works Concreting Works Rebar Fixing Works Formwork Erection Works | Dust pollution Noise pollution Waste generation Water pollution |
| Tormwork Erection Works | Water polition |

3 Major Accomplishment

3.1 Deliverables

Deliverables reviewed or prepared in the reporting month are summarised in **Table** 3.1

Table 3.1 Deliverables

| Description | Status |
|--|----------------------------|
| Monthly Audit Report No. 19 – Apr 2022 | Submitted on (10 May 2022) |

Planned deliverables to be reviewed or prepared in the coming month are summarised in **Table 3.2**

Table 3.2 Planned deliverables

| Description | Expected Submission Date | Status / Revised Submission Date | |
|--|-----------------------------|-------------------------------------|--|
| Monthly Audit Report No. 20 – May 2022 | 10 June 2022 | On schedule | |

3.2 Meetings

No meeting was attended in the reporting month.

3.3 Summary of Work Done

Upon commencement of the Assignment, accumulated number of IEC monthly audit report is summarised in **Table 3.3**.

Table 3.3 Summary of work done

| Work | Number |
|-----------------------------------|--------|
| IEC Pre-construction Audit Report | 1 |
| IEC Monthly Audit Report | 20 |

3.4 IEC Site Audit

IEC site audit was conducted on 25th May 2022 together with the Contractor's representative. There were no major site defects observed in the reporting month. The IEC site audit checklist is given in Appendix 1.

Appendix 1

IEC Site Audit Checklist

The Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development Independent Environmental Checker Environmental Site Inspection Checklist



| | Project A Contract No. Inspected By I | P.71753-00 AFCD AMAWBC EC's Rep. : HTT Cilient's Rep. : Architect's Rep. : Contractor's Rep. : | ton Tam | <u>-</u> - - - - | IEC Client Contractor Inspection D Time Period | ate _ | AFCD | ng Hold | rtners Ho lings Ltd. | 202 1/2 | |
|---|--|---|---|--|--|-------|----------------|---------|-------------------------|------------|-----------------|
| | 5 | | Overcast Low Breeze | Storm Strong | ∏ Rain | □ Dri | zzie Fempei | | Hazy | | 25. ° |
| No. 1 2 3 4 5 | Is drainage syste Is drainage syste Is drainage syste Are there dykes to Are there perimet runoff from outsid Are sediment con | ter Quality and Draina m adequate? m well maintained? m adequately designe o surround areas of ea er channels at site bo le the site so that it wil trol measures inspect ary ditches for runoff of ary ditches for runoff of made and Drain made are are designed. | d for storm flow arthworks for flo- undaries to intel I not wash acrosed & maintained | od protect rcept storr ss the site d after rair | n ? ny storms? | | | | Rdr Obs | s N/C | Photos / Remark |
| 8 9a 9b 10 11 | Do permanent dra Is site runoff proh Is groundwater fro | ary ditches with silt re ainage channels have: itated from entering th om tunnels or surface | sedimenta traps and e river channel? | ation basin baffles? ? | ? | | | | | | |
| 12 13a 13b 13c 14 15 | Are the sediments Are there neutrali Is the discharge of Is the discharge fi | ntation tanks for settlin ation tanks: construc with ade free fron sation tanks for concre liverted to and treated rom neutralisation tank | ted of pre-formed quate capacity? a silt and sedimen ete batching/mix in neutralisation | d individual nt? king discha n tanks? | cells? arge? | | | Ď, | | | |
| 17 18 19 20 | Are oil and grease Is there any bypa | osal? ceptors in drainage sy e removed regularly (a ss for oil to prevent flu plant cleaned of earth | at least weekly)? shing during pe | riods of he | eavy rain? | | | | | | |
| 21 22a 22b 22c 22d 22e | = | adequ paved acces | ate design? ate settling & rer access road lea s road sufficiently | ding to exi | !? | | | | | | |
| 22e 23 24 25 26 27 28 29 30 | Are exposed slop Are open stockpil Are manholes cov Are accessed roa Are toilets connec Are debris and rul | wheel wheel stabilized after comple e surfaces covered (be es covered during hee vered and sealed? ds protected by crush ted to foul sewer or clobish on site collected charge licence available. | y tarpaulin or ot ivy rain? ed stones or gra nemical toilets p and disposed of | her means avels? provided? of properly | • | | | | | | |





| No. | Part III Air Quality | N/A N/O Yes, Rdr Obs N/C Photos / Remarks |
|----------|--|---|
| 1 | Are vehicles in the site travelling within speed limit of 10 km/h? | |
| 2 | Are site vehicle movement confined to designated haul roads? | |
| 3 | Is the public road around the site entrance kept clean and free from dust? | |
| 4 | Are areas of site with regular traffic movement have hard surface? | |
| 5 | Are the haul roads watered regularly to avoid dust disturbance? | |
| 6 | Are unpaved areas watered regularly to avoid dust disturbance? | |
| 7 | Does the water spraying truck work effectively? | |
| 8 | Is working area of excavation or earth moving operation sprayed with | |
| - | water to maintain the entire surface wet? | |
| 9 | Are the dusty materials sprayed with water during transfer operation? | _ |
| 10 | Do the site vehicles use the wheel wash at the site exits? | |
| 11 | Does the wheel wash work effectively? | |
| 12 | Are hoarding not less than 2.4m tall provided beside roads or areas with | |
| | public access and in good condition? | |
| 13 | Are incombustible screens not less than 1.8m tall provided in the public area | |
| | affected by exhaust fumes or smoke emission? | <u> </u> |
| 14 | Is dark smoke emission avoided? | |
| 15 | Are dusty materials properly covered? | |
| 16 | Are the bags of cement (more than 20) covered entirely? | |
| 17 | Are the excavated materials dropped at minimum practical height? | |
| 18 | Are conveyor belts fitted with windboards, transfer points and hoppers | |
| | enclosed? | / |
| 19 | Are bulk fine grained materials stored in closed silos fitted with high level | |
| | alarm indicator? | / |
| 20 | Are air vents on cements silos fitted with fabric filters? | |
| 21 | Are weigh hoppers vented to suitable filters? | |
| 22 | Are there enclosures around the main dust-generating activities? | |
| 23 | Are completed earthworks sealed and hydroseeded and planted as soon | |
| | as practicable? | / |
| 24 | Is open burning avoided? | |
| 25 | Are vehicles and equipment switched off while not in use? | |
| 26 | Are all trucks loaded to a level within the side and tail boards? | |
| 27 | Are materials transported by dump trucks with mechanical cover? | |
| 28 29 | Do the truck covers work effectively? Does ULSD used in the construction activities? | |
| 30 | Observable dust sources | ☐ Vehide/equipment movements , , , |
| 30 | Loading/unloading of materials | Powers Construction activities |
| | | war construction activities |
| | Part IV Construction Noise Impact | N/A N/O Yes_Rdr Obs N/C Photos / Remarks |
| No. | • | |
| 1a | Are the construction works scheduled to minimise airborne noise nuisance? groundborne noise nuisance? | |
| 1b | Are the works or equipment sited to minimise airbrone noise nuisance? | |
| 2a 2b | groundbrone noise nuisance? | |
| 3 | Are all plant and equipment well maintained and in good operating condition? | |
| 4 | Are idling equipment throttled down or turned off? | |
| 5 | Are powered mechanical equipment covered or shielded by appropriate | |
| J | acoustic materials? | |
| 6 | Are silenced equipment used where practicable? | |
| 7 | Are noise enclosure, noise barrier, or portable noise barrier used | |
| • | where necessary? | <u> </u> |
| 8 | Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? | |
| 9 | Do Quality Powered Mechanical Equipments (QPME) have valid noise labels? | |
| 10 | Do air compressors have valid noise labels? | |
| 11 | Do compressors operate with doors closed? | |
| 12 | Are Construction Noise Permits available for inspection? | |
| 13 | Major noise source(s) | Construction activities inside of site |
| | Construction activities outside of site | Cthers |
| | | |

The Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development Independent Environmental Checker Environmental Site Inspection Checklist



| No. | Part V Waste Management and | | N/A N/O Yes Rdr Obs N/C | Photos / Remarks |
|-----|---|--|--------------------------|------------------|
| 1a | General refuse: Is accumulation avoi | | | |
| 1b | | ubbish bins) available? | | |
| 1c | Is there regular and p | | | |
| 2a | | ce or minimisation of construction | | |
| 25 | <u> </u> | n (e.g. use of steel formwork)? | / | |
| 2b | | segregation as far as practicable | | |
| 2c | for reuse and re | • | / | |
| 2d | | vaste reused where practicable? | | |
| Zu | area or public la | vaste disposed at public dumping ndfill? | | |
| 2e | Are trip tickets a | vailable for inspection? | | |
| 3a | Chemical waste/waste oil: Is there de | esignated storage area? | | |
| 3b | Is chemical | al waste/waste oil stored properly? | | |
| 3с | Is there pr | oper disposal? | | |
| 3d | Are trip tio | kets available for inspection? | ¥0 0,0 0 0 | |
| 3e | Is chemical inspection | al waste license available for ? | | |
| 4a | Excavated material: Does excavated m | aterial appear uncontaminated | | |
| | (colour, odour)? | | , | |
| 4b | If contamination is followed? | suspected, is appropriate procedure | 4 0000 | |
| 4c | Are trip tickets ava | ilable for inspection? | | |
| 5a | Chemical/fuel: Is chemical/fuel store | ed in bunded area? | | |
| 5b | Is bund capacity ade | quate (>110% of the largest tank)? | | |
| 5c | Are storage areas pro sealed area? | ovided with locks and located on | | |
| 6 | Are relevant license/permit for disposal of construction waste or excavated materials available for inspection? | | | |
| 7 | is foam, oil, grease or other objectional or sewer avoided? | ble matters in water of nearby drains | | |
| No. | Part VII Others | | N/A N/O Yes, Rdr Obs N/C | |
| 1 | Is a copy of the relevant permits/licences/registrations displayed | | | |
| | on the Project site at all vehicular site a convenient location for public information | entrances/exits or at | | |
| | | | | |

Part VIII Follow-up for the Pervious Site Audit Part IX

Remarks

Obs: NZL RJr: NZL

Part X Signatures