Your ref
Our ref 271753/L012/ST/cf

ARUP

By Registered Mail

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Director,
The EIA Ordinance Register Office,
Environmental Protection Department,
27th floor, Southorn Centre,
130 Hennessy Road, Wanchai,
Hong Kong

10 Sep 2021

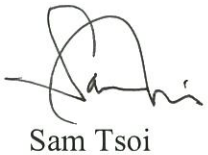
Dear Sirs

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. 11

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.11 (1 – 31 Aug 2021) for your attention.

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

Yours faithfully



Sam Tsoi
Independent Environmental Checker

Enc

cc One hard copy without CD – Mr Clark Chan, 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. 11
(1- 31 Aug 2021)

Job number 271753

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ARUP

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Appendices

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 1 Project location plan

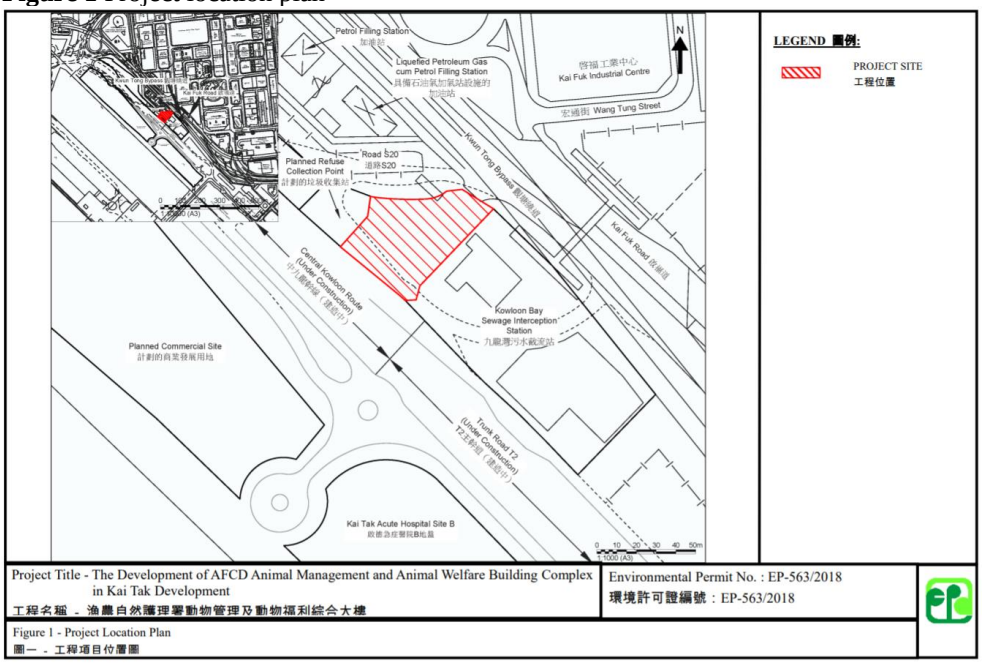
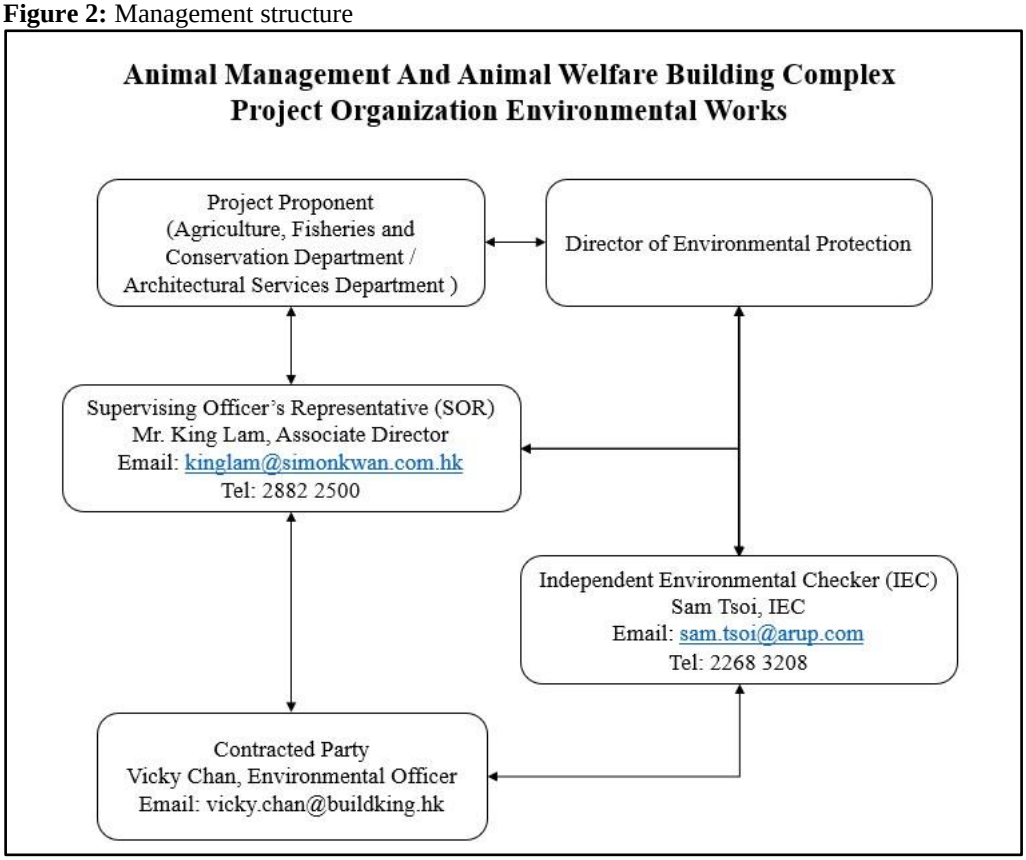


Figure 2: Management structure



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:

- Piling works
- Grout Curtain and Pipe Pile

The environmental performance was considered acceptable during the assignment period from 1st Aug 2021 to 31st Aug 2021.

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
Air	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
	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 should be paved with concrete, bituminous materials or hardcore.	Implemented

Mitigation Measures		Status
	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.
Noise	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
	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
Water	Full compliance of Pro PECC Note 1/94 "Construction Site Drainage"	Implemented
	Surface run-off and sewage effluent should be discharged into sewerage system	Implemented in surface run-off, chemical toilets are adopted.
Waste Management	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
	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
	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 other licensed treatment facilities, according to the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C).	To be implemented, no chemical waste was transferred to a disposal 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.)
Life hazard	A dedicated access route should be used for construction vehicles.	Implemented
	Any lifting operation over the site boundary should be strictly minimised.	Implemented
	Any lifting (if any) should be assessed, controlled and closely supervised by Contractors and qualified operation staff.	Implemented
	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
Landscape	Temporary stockpile of excavated and building materials should be covered.	Implemented
	Hoardings with outlook matching with surrounding landscape should be erected.	Implemented
	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 Percussive Piling	PP – RE0034-20	28 Sep 2020	13 Apr 2021
	PP – RE0005-21	05 Mar 2021	13 Oct 2021
Construction Noise Permit for General Construction Work	GW – RE0835-20	05 Oct 2020	20 Mar 2021
	GW – RE0144-21	19 Feb 2021	20 Sep 2021

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
• Piling works	• Dust pollution • Noise pollution • Waste generation • Water pollution

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. 10 – July 2021	Submitted on (10 Aug 2021)

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. 11 – Aug 2021	10 Sep 2021	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	11

3.4 IEC Site Audit

IEC site audit was conducted on 25th Aug 2021 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

ARUP

Ref. No.	271753-00		
Project	AFCD AMAWBC	**IEC**	Ove Arup & Partners Hong Kong Ltd.
		Client	AFCD
Contract No.		**Contractor**	Build King Holdings Ltd.
Inspected By	IEC's Rep. : Hilton Tam		
	Cilent's Rep. :	**Inspection Date**	25-08-2021
	Architect's Rep.:	**Time Period**	0200 - 1130
	Contractor's Rep. : Vicky Chan		

Part I Weather

Condition ☑ Sunny ☐ Fine ☐ Overcast ☐ Storm ☐ Rain ☐ Drizzle ☐ Hazy
Humidity ☐ High ☑ Moderate ☐ Low
Wind ☑ Calm ☐ Light ☐ Breeze ☐ Strong
Temperature 30 °C

No.	Part II Water Quality and Drainage	N/A	N/O	Yes	Rdr	Obs	N/C	Photos / Remarks
1	Is drainage system adequate?	✓						
2	Is drainage system well maintained?	✓						
3	Is drainage system adequately designed for storm flow?	✓						
4	Are there dykes to surround areas of earthworks for flood protection?			✓				
5	Are there perimeter channels at site boundaries to intercept storm runoff from outside the site so that it will not wash across the site?			✓				
6	Are sediment control measures inspected & maintained after rainy storms?	✓						
7	Are there temporary ditches for runoff discharge into appropriate watercourse?	✓						
8	Are these temporary ditches with silt retention and removal facilities?	✓						
9a	Do permanent drainage channels have: sedimentation basin?	✓						
9b	traps and baffles?	✓						
10	Is site runoff prohitated from entering the river channel?			✓				
11	Is groundwater from tunnels or surface runoff collected and discharged via sedimentation traps/tanks?	✓						
12	Are there sedimentation tanks for settling runoff prior to disposal?			✓				
13a	Are the sedimentation tanks: constructed of pre-formed individual cells?			✓				
13b	with adequate capacity?			✓				
13c	free from silt and sediment?			✓				
14	Are there neutralisation tanks for concrete batching/mixing discharge?	✓						
15	Is the discharge diverted to and treated in neutralisation tanks?	✓						
16	Is the discharge from neutralisation tanks routed to silt trap or sedimentation tanks before disposal?	✓						
17	Are there oil interceptors in drainage system?	✓						
18	Are oil and grease removed regularly (at least weekly)?	✓						
19	Is there any bypass for oil to prevent flushing during periods of heavy rain?	✓						
20	Are vehicles and plant cleaned of earth, mud and debris before leaving the site?			✓				
21	Is a wheel washing bay provided at every site exit?			✓				
22a	Is the wheel washing bay with: adequate design?			✓				
22b	adequate settling & removal of sand/silt?			✓				
22c	paved access road leading to exit?			✓				
22d	access road sufficiently backfill toward			✓				
22e	wheel wash bay?							
23	Is exposed earth stabilized after completion of earthworks?	✓						
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	✓						
25	Are open stockpiles covered during heavy rain?	✓						
26	Are manholes covered and sealed?	✓						
27	Are accessed roads protected by crushed stones or gravels?			✓				
28	Are toilets connected to foul sewer or chemical toilets provided?			✓				
29	Are debris and rubbish on site collected and disposed of properly?			✓				
30	Is wastewater discharge licence available for inspection?			✓				

Notes:
N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

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?	☐	☐	☑	☐	☐	☐	
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	Do the truck covers work effectively?	☐	☐	☑	☐	☐	☐	
29	Does ULSD used in the construction activities?	☐	☐	☑	☐	☐	☐	
30	Observable dust sources ☐ Wind erosion ☐ Loading/unloading of materials	☐ Vehicle/equipment movements ☑ Others Construction activities						

No.	Part IV Construction Noise Impact	N/A	N/O	Yes	Rdr	Obs	N/C	Photos / Remarks
1a	Are the construction works scheduled to minimise airborne noise nuisance?	☐	☐	☑	☐	☐	☐	
1b	groundborne noise nuisance?	☐	☐	☑	☐	☐	☐	
2a	Are the works or equipment sited to minimise airbrone noise nuisance?	☐	☐	☑	☐	☐	☐	
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 acoustic materials?	☐	☐	☑	☐	☐	☐	
6	Are silenced equipment used where practicable?	☐	☐	☑	☐	☐	☐	
7	Are noise enclosure, noise barrier, or portable noise barrier used where necessary?	☐	☐	☑	☐	☐	☐	
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) ☐ Traffic ☐ Construction activities outside of site	☑ Construction activities inside of site ☐ Others						

Notes:
N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

No.	Part V Waste Management and Contamination	N/A	N/O	Yes	Rdr	Obs	N/C	Photos / Remarks
1a	General refuse: Is accumulation avoided?	☐	☐	☑	☐	☐	☐	
1b	Is receptacles (e.g. rubbish bins) available?	☐	☐	☑	☐	☐	☐	
1c	Is there regular and proper disposal?	☐	☐	☑	☐	☐	☐	
2a	Construction waste: Is there avoidance or minimisation of construction waste generation (e.g. use of steel formwork)?	☐	☐	☑	☐	☐	☐	
2b	Is there on site segregation as far as practicable for reuse and recycle?	☐	☐	☑	☐	☐	☐	
2c	Is construction waste reused where practicable?	☑	☐	☐	☐	☐	☐	
2d	Is construction waste disposed at public dumping area or public landfill?	☐	☐	☑	☐	☐	☐	
2e	Are trip tickets available for inspection?	☐	☐	☑	☐	☐	☐	
3a	Chemical waste/waste oil: Is there designated storage area?	☐	☐	☑	☐	☐	☐	
3b	Is chemical waste/waste oil stored properly?	☐	☐	☑	☐	☐	☐	
3c	Is there proper disposal?	☑	☐	☐	☐	☐	☐	
3d	Are trip tickets available for inspection?	☑	☐	☐	☐	☐	☐	
3e	Is chemical waste license available for inspection?	☐	☐	☑	☐	☐	☐	
4a	Excavated material: Does excavated material appear uncontaminated (colour, odour)?	☐	☐	☑	☐	☐	☐	
4b	If contamination is suspected, is appropriate procedure followed?	☑	☐	☐	☐	☐	☐	
4c	Are trip tickets available for inspection?	☐	☐	☑	☐	☐	☐	
5a	Chemical/fuel: Is chemical/fuel stored in bunded area?	☐	☐	☑	☐	☐	☐	
5b	Is bund capacity adequate (>110% of the largest tank)?	☐	☐	☑	☐	☐	☐	
5c	Are storage areas provided with locks and located on sealed area?	☐	☐	☑	☐	☐	☐	
6	Are relevant license/permit for disposal of construction waste or excavated materials available for inspection?	☐	☐	☑	☐	☐	☐	
7	Is foam, oil, grease or other objectionable matters in water of nearby drains or sewer avoided?	☐	☐	☑	☐	☐	☐	

No.	Part VII Others	N/A	N/O	Yes	Rdr	Obs	N/C	Photos / Remarks
1	Is a copy of the relevant permits/licences/registrations displayed on the Project site at all vehicular site entrances/exits or at a convenient location for public information all times?	☐	☐	☑	☐	☐	☐	

Part VIII Follow-up for the Pervious Site Audit

Notes:
N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Part IX Remarks

Rdr : NIL

Obs : NIL

Part X Signatures

IEC's Representative

(Name: Hilton TAM)

Architect's Representative

(Name: S. K. Leung)

Contractor's Environmenal Officer Representative

(Name: Ms. W.S.Chan)

Notes:
N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance