Notification No.: 20171204SS

Date of Notification: 8 December 2017

Date of Investigation Report: 14 December 2017

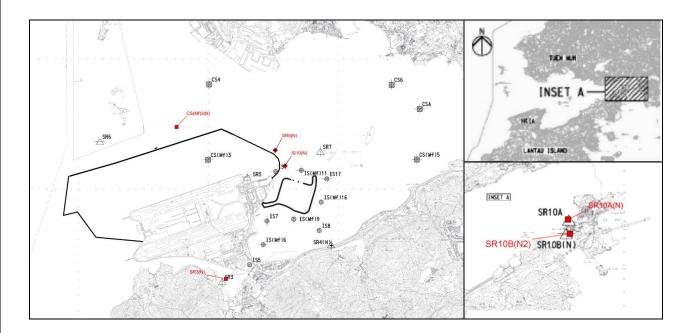
Works Inspected: Data collected from water sampling works on 4 December 2017 and the results were issued on 8 December 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

Action & Ennit Ecver (AE & EE/ / Medsured Ecver.						
PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
	SR6 23.5 and 120% (i.e. 17.9 for mid- bl / (20.0 cm id- cm i		26.0	19.3		
SS	SR7	Depth Average	ebb/13.6 for mid- flood) of upstream control station's SS at	upstream control station's SS at the same tide of	12.1	24.1
	SR10B(N) the same tide of and 10n WSD Set	the same day and 10mg/L for WSD Seawater intakes	13.4	24.0		
Notes: AL means Action Level. LL means Limit Level. Bold means AL exceedances. <u>Bold with underline</u> means LL exceedances. Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4 Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA						

On 4 December 2017, one AL exceedance of SS at SR6 was recorded during mid-ebb tide and two AL exceedances of SS at SR7 and SR10B(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 4 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Evan Wong	Title:	Environmental Team Representative
Signature:	4	Date:	14 December 2017
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	14 December 2017

Notification No.: 20171206SS

Date of Notification: 14 December 2017

Date of Investigation Report: 19 December 2017

Works Inspected: Data collected from water sampling works on 6 December 2017 and the results were issued on 14 December 2017

Monitoring Location: Water Quality Monitoring Station

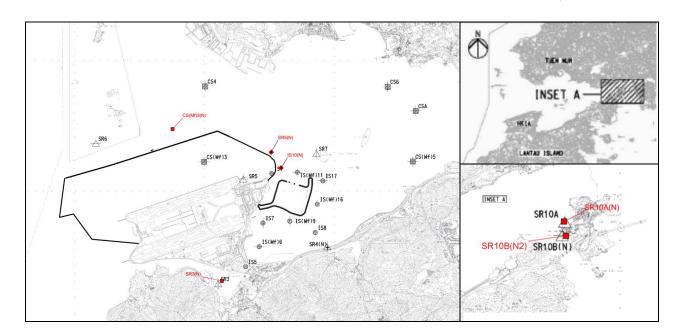
Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

Action & Limit Level (AL & LL) / Measured Level:

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
ss —	IS8		23.5 and 120% (i.e. 21.1 for mid- ebb/15 for mid- flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 22.8 for mid- ebb/16.3 for mid- flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	19.3	31.8
	IS(Mf)9	_ Depth Average			7.1	24.0
	SR5(N)				11.9	25.6
	SR6				14.2	27.5
LL means Bold mea Bold with	Action Level. Limit Level. Ins AL exceed Inderline ma	ances. eans LL exce	eedances.) tide: CS(Mf)3(N) ar		I	

Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA

On 6 December 2017, four AL exceedances of SS at IS8, IS(Mf)9, SR5(N) and SR6 were recorded during mid-flood tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 6 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Fils	Date:	19 December 2017
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	19 December 2017

Notification No.: 20171208SS

Date of Notification: 15 December 2017

Date of Investigation Report: 19 December 2017

Works Inspected: Data collected from water sampling works on 8 December 2017 and the results were issued on 15 December 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

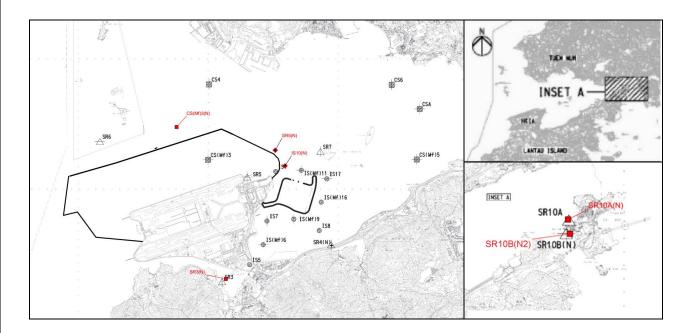
Action & Limit Level (AL & LL) / Measured Level:

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
	IS8			34.4 and 130%	19.3	33.3
00	SR4(N) Depth	(i.e. 22.8 for mid- ebb/16.4 for mid- flood) of upstream control	18.4	26.3		
SS	SR6	Average	upstream control station's SS at the same tide of the same day	station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	26.8	22.7
	SR10A				11.0	26.9
LL means Bold mea Bold with	Action Level. Limit Level. Ins AL exceed underline me	ances. eans LL exce	eedances.	I	I	

Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4

Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA

On 8 December 2017, one AL exceedance of SS at SR6 was recorded during mid-ebb tide and three AL exceedances of SS at IS8, SR4(N) and SR10A were recorded during mid-flood tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 8 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Kills	Date:	19 December 2017
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	19 December 2017

Notification No.: 20171211SS

Date of Notification: 19 December 2017

Date of Investigation Report: 9 January 2018

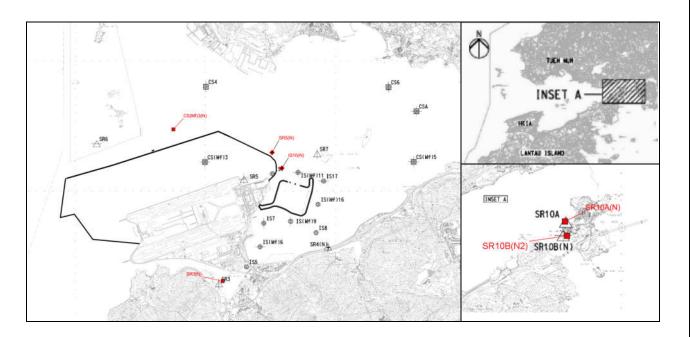
Works Inspected: Data collected from water sampling works on 11 December 2017 and the results were issued on 15 December 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)	
SS	IS(Mf)9	Depth Average	23.5 and 120% (i.e. 11.3 for mid- ebb/10 for mid- flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 12.3 for mid- ebb/10.8 for mid- flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	28.5	11.8	
Notes: AL means Action Level.							
LL means Limit Level. Bold means AL exceedances.							
Bold with underline means LL exceedances.							
			o tide: CS(Mf)3(N) ar od tide: CS(Mf)5, CS				
eperiodin							

On 11 December 2017, one AL exceedance of SS at IS(Mf)9 was recorded during mid-ebb tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 11 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Fuls	Date:	9 January 2018
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	9 January 2018

Notification No.: 20171213SS

Date of Notification: 20 December 2017

Date of Investigation Report: 21 December 2017

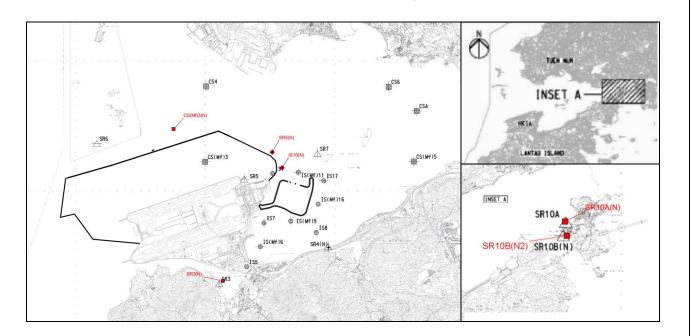
Works Inspected: Data collected from water sampling works on 13 December 2017 and the results were issued on 20 December 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
SS	IS8	Depth Average	23.5 and 120% (i.e. 8.2 for mid- ebb/10.7 for mid- flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 8.9 for mid- ebb/11.6 for mid- flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	25.0	21.4
Notes: AL means Action Level. LL means Limit Level. Bold means AL exceedances. <u>Bold with underline</u> means LL exceedances. Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4 Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA						

On 13 December 2017, one AL exceedance of SS at IS8 was recorded during mid-ebb tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 13 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Kuls	Date:	21 December 2017
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	21 December 2017

Notification No.: 20171220SS

Date of Notification: 3 January 2018

Date of Investigation Report: 8 January 2018

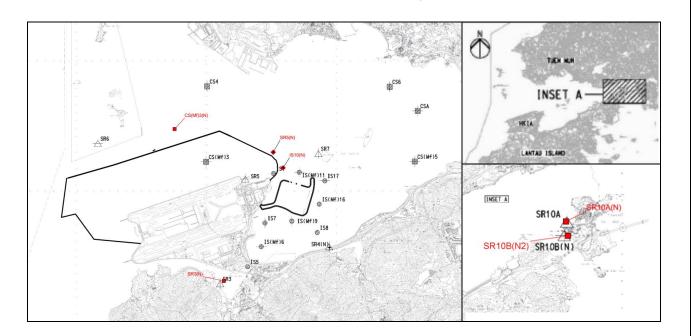
Works Inspected: Data collected from water sampling works on 20 December 2017 and the results were issued on 3 January 2018

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
SS	SR6	Depth Average	23.5 and 120% (i.e. 11.4 for mid- ebb/14.5 for mid- flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 12.3 for mid- ebb/15.7 for mid- flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	12.6	28.9
Notes: AL means Action Level. LL means Limit Level. Bold means AL exceedances. <u>Bold with underline</u> means LL exceedances. Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4 Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA						

On 20 December 2017, one AL exceedance of SS at SR6 was recorded during mid-flood tide.



As confirmed by the Contractor, there was no marine transportation and marine-based work on 20 December 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

As the exceedance was not related to the Contract, no immediate actions are required. However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Rulz	Date:	8 January 2018
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	8 January 2018

Notification No.: 20171222SS_v1

Date of Notification: 4 January 2018

Date of Investigation Report: 10 January 2018

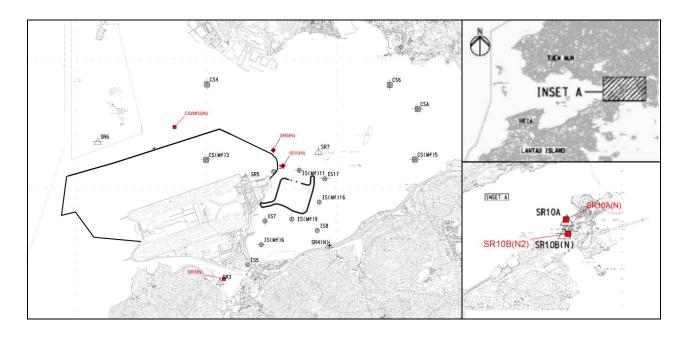
Works Inspected: Data collected from water sampling works on 22 December 2017 and the results were issued on 4 January 2018

Monitoring Location: Water Quality Monitoring Station

Parameter: Dissolved Oxygen (DO)/ Suspended Solid (SS)/ Turbidity (TURB)

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)
SS	SR6	Depth Average	23.5 and 120% (i.e. 17.3 for mid- ebb/12.7 for mid- flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 18.7 for mid- ebb/13.8 for mid- flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	26.0	28.3
LL means Bold mea Bold with Upstream		ances. eans LL exce ns of mid-ebl	eedances. o tide: CS(Mf)3(N) ar od tide: CS(Mf)5, CS6			

On 22 December 2017, one AL exceedance of SS at SR6 was recorded during mid-flood tide and one AL exceedance of SS at SR6 was recorded during mid-ebb tide.



As confirmed by the Contractor, there was no marine transportation on 22 December 2017. According to information from Contractor, temporary loading and unloading facility dismantling which is marine-based work conducted on 22 December 2017. Although AL exceedances were recorded, the exceedance station, SR6, was far away from marine based work (more than 6km). No exceedances were recorded at monitoring stations IS10(N) and SR5(N), which are closer to the marine-based works, on the same day. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

Actions were taken under action plan:

- 1. Not applicable as SS was not measured in situ;
- 2. After considering the above-mentioned investigation results, it appears that it was unlikely that the suspended solids exceedance was attributed to active construction activities of this Contract;
- 3. IEC, Contractor and ER were informed via email;
- 4. Monitoring data, all plant, equipment and Contractor's working methods were checked;
- 5. Since it is considered that the suspended solids exceedance is unlikely to be contract related, as such, Actions 5-7 under the EAP are not considered applicable.

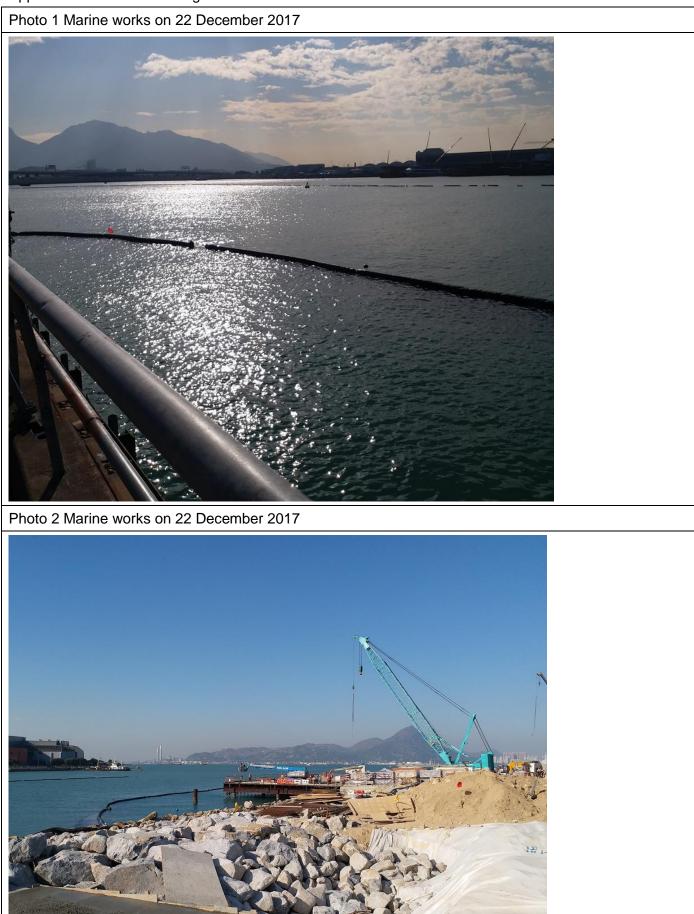
However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Kuls	Date:	10 January 2018
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	10 January 2018

Appendix A – Photos of the sea condition during samples monitoring at SR6



Appendix B - Photos showing the condition of marine-based works area



Notification No.: 201711223_Air_24hr

Date of Notification: 5 January 2018

Date of Investigation Report: 10 January 2018

Date of Environmental Quality Limit Exceedance: 23 December 2017 and the results were issued on 4 January 2018

Monitoring Location: AMS3B – Site Boundary of Site Office Area at Work Area WA2

Monitoring Date: 23 December 2017 Start Time: 08:00

PARAMETER	STATION	<u>AL (µg/m³)</u>	<u>LL (µg/m³)</u>	MEASURED LEVEL, µg/m ³	
24-hr TSP	AMS3B – Site Boundary of Site Office Area at Works Area WA2	167	260	182	
Notes: Bold Italic means AL exceedance Bold Italic with underline means LL exceedance					

On 23 December 2017, one AL exceedance of 24-hr TSP at AMS3B was recorded.

Based on the information form the Contractor, the construction works undertaken on 23 and 24 December 2017 are shown as below:

- Backfilling
- Falsework stripping
- Pipework and ductwork installation
- Wet trade works
- Dry trade works
- MEP High Level Containment
- Removal of temporary works
- Window wall glazing
- Hanging scaffolding removal
- Southern toilet
- MISC steelwork
- Lift installation
- Escalator Installation
- Glazed lift installation
- Road & Kerbing
- Water features and planters
- Temporary Loading and Unloading facility dismantling

The Contractor confirmed that the mitigation measures according to Water Spraying Plan in December 2017 (Appendix A) are implemented to avoid dust emission. Photos of haul road condition and dust suppression are included in Appendix A. The Contractor has provided the guideline to remind the site vehicles travel within speed limit of 8km/hr. According to the site inspection conducted on 27 December 2017, no dusty activities and dry condition in haul road were observed in the site area.

The Air Quality Health Index (AQHI) of Tung Chung station with the wind data from the on-site wind station are shown in Appendix B. The hourly AQHI of Tung Chung Station ranged 3 to 8 (Low to Very High) on 23 and 24 December 2017 during monitoring period. According to the wind data at on-site wind station, no prevailing wind direction was found in the monitoring period. The PCB site of HKBCF is far away from AMS3B (more than 1km). No potential dust source was observed near the monitoring station at AMS3B during the monitoring period.

Therefore, it is concluded that the exceedances were not related to the Contract.

Actions taken/ to be taken:

The Water Spraying Plan including the information of watering schedule, routing of trucks of for watering and the location of water filling, was prepared and submitted to RE and ENPO. The Contractor was also reminded to implement all necessary mitigation as specified in EIA (Section 5.5.6.3), EM&A Manual (EM&A Log Ref: A3), EMP, Method Statements, General and Particular Specifications of this Project to minimize the potential dust impact during construction activities.

Prepared by:	Ruby Law	Title:	Environmental Team Representative
Signature:	Kuls	Date:	10 January 2018
Checked by:	Keith Chau	Title:	Environmental Team Leader
Signature:	Keith	Date:	10 January 2018



Contract No. HY/2013/01 Hong Kong – Zhuhai – Macao – Bridge Boundary Crossing Facility – Passenger Clearance Building

Water Truck License Plate Number: TH7681

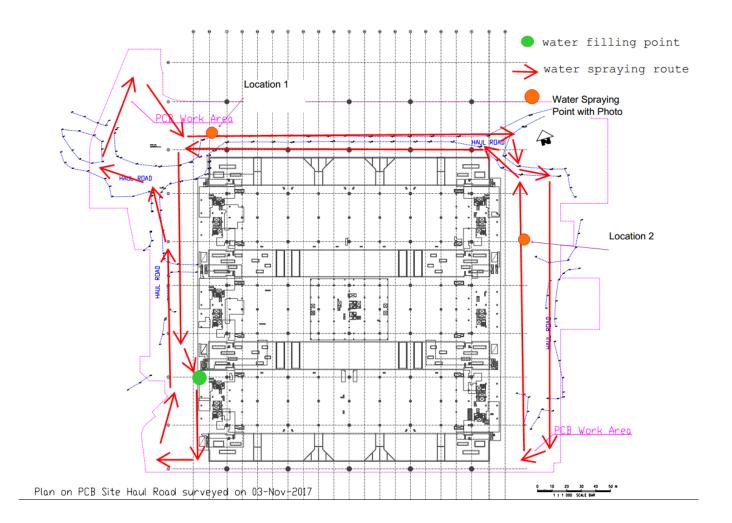
Capacity of Water Truck: 18000L

Volume of water / distance travelled = 11.4L/m

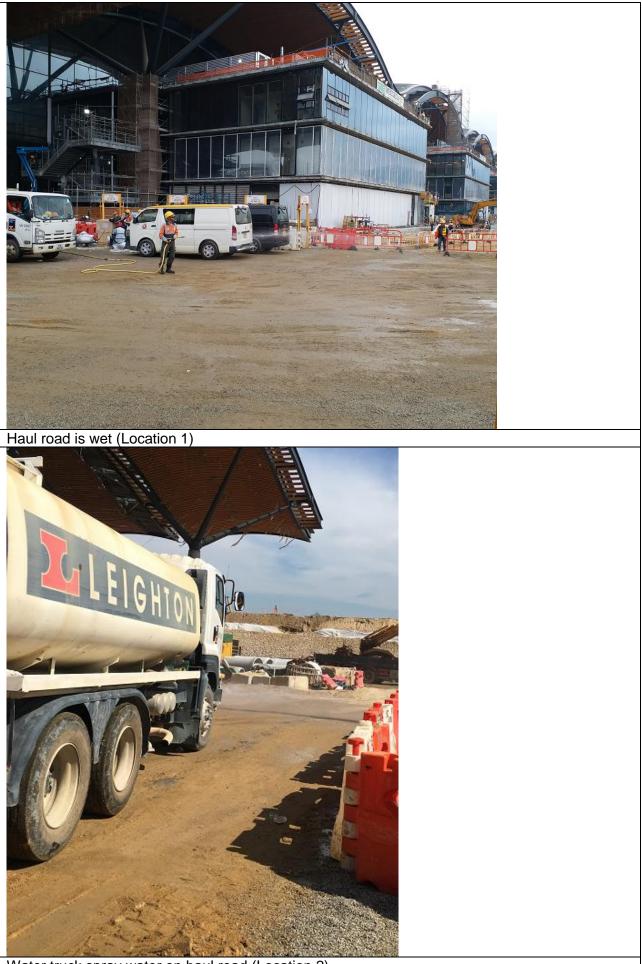
Water Truck could spray 18000L in one 50 minutes trip.

Time of water spraying Cycle 1 08:00 - 09:15 2 09:15 - 10:30 3 10:30 - 11:45 4 13:00 - 14:15 5 14:15 - 15:30 6 15:30 - 16:45 7 16:45 - 18:00 8 18:00 - 19:00

Planned Schedule of Watering Spraying by Water Truck

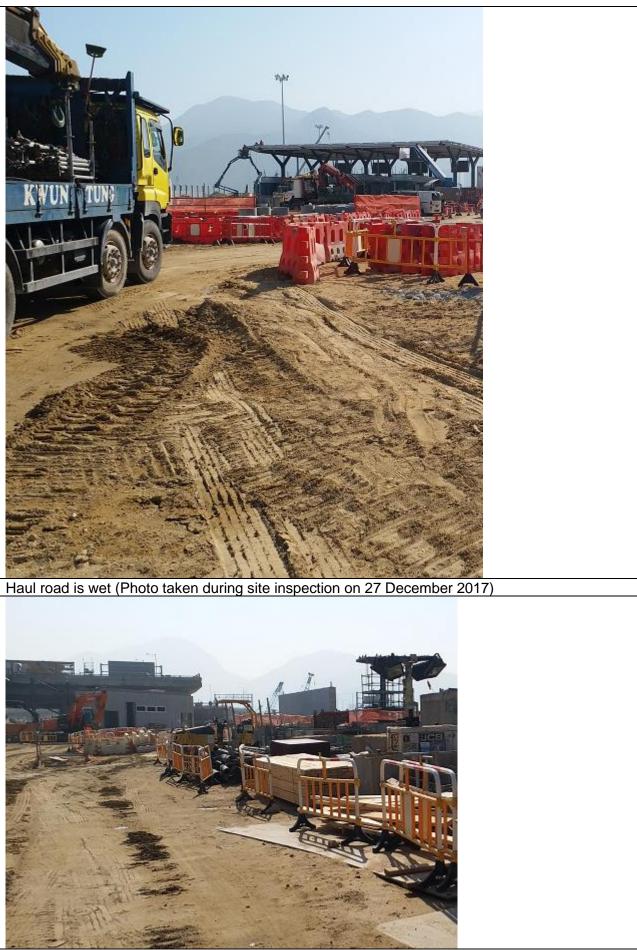


Water spraying record



Water truck spray water on haul road (Location 2)

Site condition on 27 Dec 2017



Haul road is wet (Photo taken during site inspection on 27 December 2017)

Date	Hour	AQHI at Tung Chung Station	Average Wind Speed (m/s) [#]	Average Wind Direction #
23/12/2017	08:00	3	0	ENE
23/12/2017	09:00	3	0	NNE
23/12/2017	10:00	4	0	ENE
23/12/2017	11:00	4	0	ENE
23/12/2017	12:00	4	0	NNE
23/12/2017	13:00	4	0	N
23/12/2017	14:00	4	0	NE
23/12/2017	15:00	5	0	NE
23/12/2017	16:00	6	0	NNE
23/12/2017	17:00	6	0	N
23/12/2017	18:00	6	0	
23/12/2017	19:00	6	0	NE
23/12/2017	20:00	6	0	WNW
23/12/2017	21:00	5	0	N
23/12/2017	22:00	5	0	N
23/12/2017	23:00	5	0	NNW
24/12/2017	00:00	5	0	ENE
24/12/2017	01:00	6	0	ESE
24/12/2017	02:00	5	0	
24/12/2017	03:00	6	0	
24/12/2017	04:00	7	0	W
24/12/2017	05:00	8	0	SSE
24/12/2017	06:00	8	0	NNW
24/12/2017	07:00	7	0	
24/12/2017	08:00	7	0	

Remark:

 The data collection for calculation of AQHI was affected due to station or equipment maintenance, the data of a most similar station was adopted.

#- The related wind data is obtained from the on-site wind station.

N.A. - Not available.