

Appendix M

Cumulative Statistics on  
Exceedances, Complaints,  
Notifications of Summons  
and Successful Prosecutions

*Appendix M1 Cumulative Statistics on Exceedances*

		Total No. recorded in this reporting month	Total No. recorded since contract commencement
1-Hr TSP	Action	0	0
	Limit	0	1
24-Hr TSP	Action	0	2
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water Quality	Action	23	249
	Limit	2	26
Impact Dolphin Monitoring	Action	0	11
	Limit	0	16

*Appendix M2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (July 2019)	0	0	0
Total No. received since contract commencement	14	0	0

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 24 July 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance  
0215660\_3 July 2019\_Bottom DO\_E\_Station SR4a

A total of one exceedance was recorded on 3 July 2019.

Regards,

A handwritten signature in blue ink that reads "Jasmine".

Dr Jasmine Ng  
*Environmental Team Leader*

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

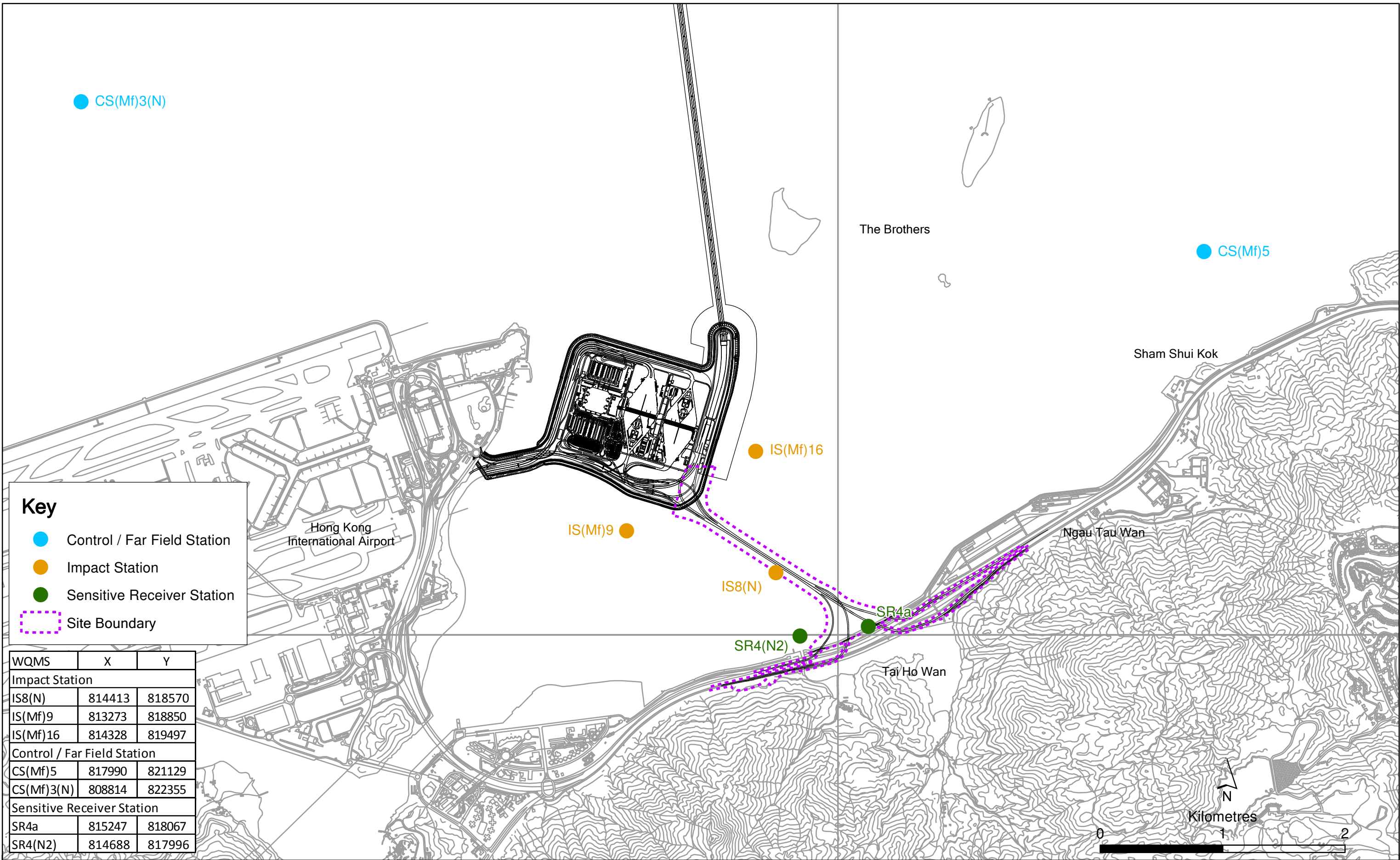
**Notification of Exceedance**

<b>Log No.</b>	<u>Action Level Exceedance</u> 0215660_3 July 2019_Bottom DO_E_Station SR4a [Total No. of Exceedance = 1]	
<b>Date</b>	3 July 2019 (Measured) 24 July 2019 (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<u>Action Level Exceedance</u> 1. Mid-ebb at SR4a (Bottom-depth DO = 4.6 mg/L)	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 3 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 3 July 2019.</li> <li>• Apart from bottom-depth DO exceedance at SR4a, levels of DO at all monitoring stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day. The slight exceedance of bottom-depth DO at SR4a may be due to natural fluctuation of water quality.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 3 July 2019 and locations of water quality monitoring stations are attached.	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Surface	1	1	27.6	7.8	21.2	5.8	5.4	6.3	6.9	8.1	8.4
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Surface	1	2	28.1	8.0	20.8	5.7		5.6		8.0	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Middle	2	1	27.4	7.8	22.5	5.1		7.5		11.3	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Middle	2	2	27.9	8.0	22.1	5.0		7.0		11.5	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Bottom	3	1	27.4	7.8	22.6	5.2	5.2	8.0	6.9	11.4	8.4
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)5	13:39	Bottom	3	2	27.9	8.0	22.2	5.1		7.2		11.1	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Surface	1	1	27.6	7.9	20.7	6.2	6.1	5.0	7.7	8.7	8.8
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Surface	1	2	28.2	8.0	20.3	6.2		4.2		8.9	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Middle	2	1	27.5	7.8	21.3	6.0		9.8		8.5	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Middle	2	2	28.0	8.0	20.9	5.9		9.9		8.7	
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Bottom	3	1	27.5	7.8	22.4	5.6	5.6	8.9	5.9	9.0	9.8
HY/2012/08	2019/07/03	Mid-Ebb	CS(Mf)3(N)	12:50	Bottom	3	2	28.1	8.0	21.9	5.5		8.3		8.8	
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Surface	1	1	27.4	7.9	22.9	5.6	5.6	6.5	5.9	9.5	9.8
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Surface	1	2	27.9	8.1	22.4	5.6		6.2		9.8	
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Bottom	3	1	27.1	7.8	24.2	5.5	5.4	5.9	5.9	9.7	9.8
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)16	12:07	Bottom	3	2	27.6	8.0	23.8	5.3		5.0		10.0	
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Surface	1	1	27.6	8.0	21.2	6.4	6.4	5.2	7.3	7.9	8.6
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Surface	1	2	28.1	8.1	20.8	6.3		4.7		7.6	
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Bottom	3	1	27.3	7.8	23.9	4.7	4.6	9.6	7.3	8.9	8.6
HY/2012/08	2019/07/03	Mid-Ebb	SR4a	11:58	Bottom	3	2	27.8	8.0	23.4	4.5	4.6	9.6	7.3	9.2	8.6
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Surface	1	1	27.6	7.8	21.7	5.7	5.7	7.3	8.0	9.7	10.9
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Surface	1	2	28.1	8.0	21.2	5.7		7.7		10.1	
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Bottom	3	1	27.5	7.8	22.2	5.4	5.4	7.7	8.0	11.9	10.9
HY/2012/08	2019/07/03	Mid-Ebb	SR4(N2)	11:54	Bottom	3	2	28.1	8.0	21.8	5.3	5.4	9.3	8.0	11.7	10.9
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Surface	1	1	27.7	8.0	21.4	6.5	6.5	7.4	7.2	10.8	11.1
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Surface	1	2	28.3	8.2	20.9	6.5		7.1		11.0	
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Bottom	3	1	27.5	7.8	22.8	5.6	5.6	7.2	7.2	11.2	11.1
HY/2012/08	2019/07/03	Mid-Ebb	IS8(N)	11:48	Bottom	3	2	28.0	8.0	22.3	5.5	5.6	7.0	7.2	11.3	11.1
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Surface	1	1					6.8		9.2		7.3
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Surface	1	2									
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Middle	2	1	27.6	7.8	20.4	6.8		9.1		10.6	
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Middle	2	2	28.2	8.0	19.9	6.7		9.2		10.9	
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Bottom	3	1					N/A		9.2		7.3
HY/2012/08	2019/07/03	Mid-Ebb	IS(Mf)9	11:40	Bottom	3	2									

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Surface	1	1	27.6	7.8	20.7	5.7	5.3	2.6	5.6	3.1	3.5
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Surface	1	2	28.1	8.0	20.3	5.6		2.7		3.4	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Middle	2	1	27.2	7.7	23.9	5.0		4.1		3.7	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Middle	2	2	27.7	8.0	23.5	4.9		4.5		3.7	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Bottom	3	1	26.5	7.7	27.1	4.3	4.3	9.8	9.6	3.5	4.2
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)5	5:32	Bottom	3	2	27.0	7.9	26.7	4.2		9.8		3.8	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Surface	1	1	27.7	7.8	19.1	6.0	5.8	3.0	9.6	4.0	4.2
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Surface	1	2	28.3	8.0	18.8	5.9		2.4		4.3	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Middle	2	1	27.8	7.8	20.5	5.7		12.7		3.9	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Middle	2	2	28.4	8.0	20.1	5.6		13.0		4.2	
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Bottom	3	1	27.8	7.8	20.6	5.7	5.7	13.3	4.6	4.2	5.0
HY/2012/08	2019/07/03	Mid-Flood	CS(Mf)3(N)	6:23	Bottom	3	2	28.4	8.0	20.2	5.6		13.4		4.5	
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Surface	1	1	27.6	7.9	21.5	6.1	6.1	4.6	4.6	5.0	5.0
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Surface	1	2	28.1	8.1	21.2	6.0		4.1		5.0	
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Bottom	3	1	27.5	7.9	21.7	6.1	6.1	4.8	4.6	5.1	4.6
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)16	7:10	Bottom	3	2	28.1	8.1	21.3	6.0		4.9		4.9	
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Surface	1	1	27.7	7.9	21.3	6.4	6.4	4.4	4.6	4.1	4.6
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Surface	1	2	28.2	8.1	20.9	6.3		4.5		4.4	
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Bottom	3	1	27.7	7.9	21.8	6.5	6.5	4.6	4.6	4.7	4.6
HY/2012/08	2019/07/03	Mid-Flood	SR4a	7:18	Bottom	3	2	28.2	8.1	21.4	6.4		4.8		4.8	
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Surface	1	1	27.5	7.9	20.6	6.5	6.5	3.7	3.9	4.4	4.6
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Surface	1	2	28.1	8.1	20.2	6.5		3.8		4.1	
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Bottom	3	1	27.5	7.9	20.7	6.6	6.6	4.0	4.9	4.8	4.6
HY/2012/08	2019/07/03	Mid-Flood	SR4(N2)	7:25	Bottom	3	2	28.1	8.1	20.3	6.6		3.9		5.0	
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Surface	1	1	27.7	7.9	21.1	6.2	6.2	5.2	4.9	4.0	4.6
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Surface	1	2	28.3	8.1	20.7	6.1		5.4		4.3	
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Middle	2	1									
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Middle	2	2									
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Bottom	3	1	27.7	7.9	21.1	6.2	6.2	4.6	5.8	4.9	3.4
HY/2012/08	2019/07/03	Mid-Flood	IS8(N)	7:30	Bottom	3	2	28.3	8.1	20.7	6.1		4.5		5.3	
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Surface	1	1					6.4		5.8		3.4
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Surface	1	2									
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Middle	2	1	27.6	7.9	21.4	6.4		5.6		5.0	
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Middle	2	2	28.1	8.1	21.0	6.3		5.9		4.8	
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Bottom	3	1					N/A		5.8		3.4
HY/2012/08	2019/07/03	Mid-Flood	IS(Mf)9	7:38	Bottom	3	2									

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations

File: T:\GIS\CONTRACT\0215660\Mxd\0215660\_WQMS.mxd  
Date: 20/7/2019

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

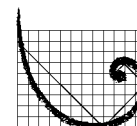
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 1 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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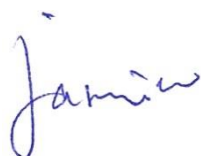
Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance  
0215660\_12 July 2019\_ Bottom DO\_E\_Station IS(Mf)16  
0215660\_12 July 2019\_ Bottom DO\_E\_Station SR4a

A total of two (2) exceedance was recorded on 12 July 2019.

Regards,



Dr Jasmine Ng  
*Environmental Team Leader*

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN - CHEK LAP KOK LINK -  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

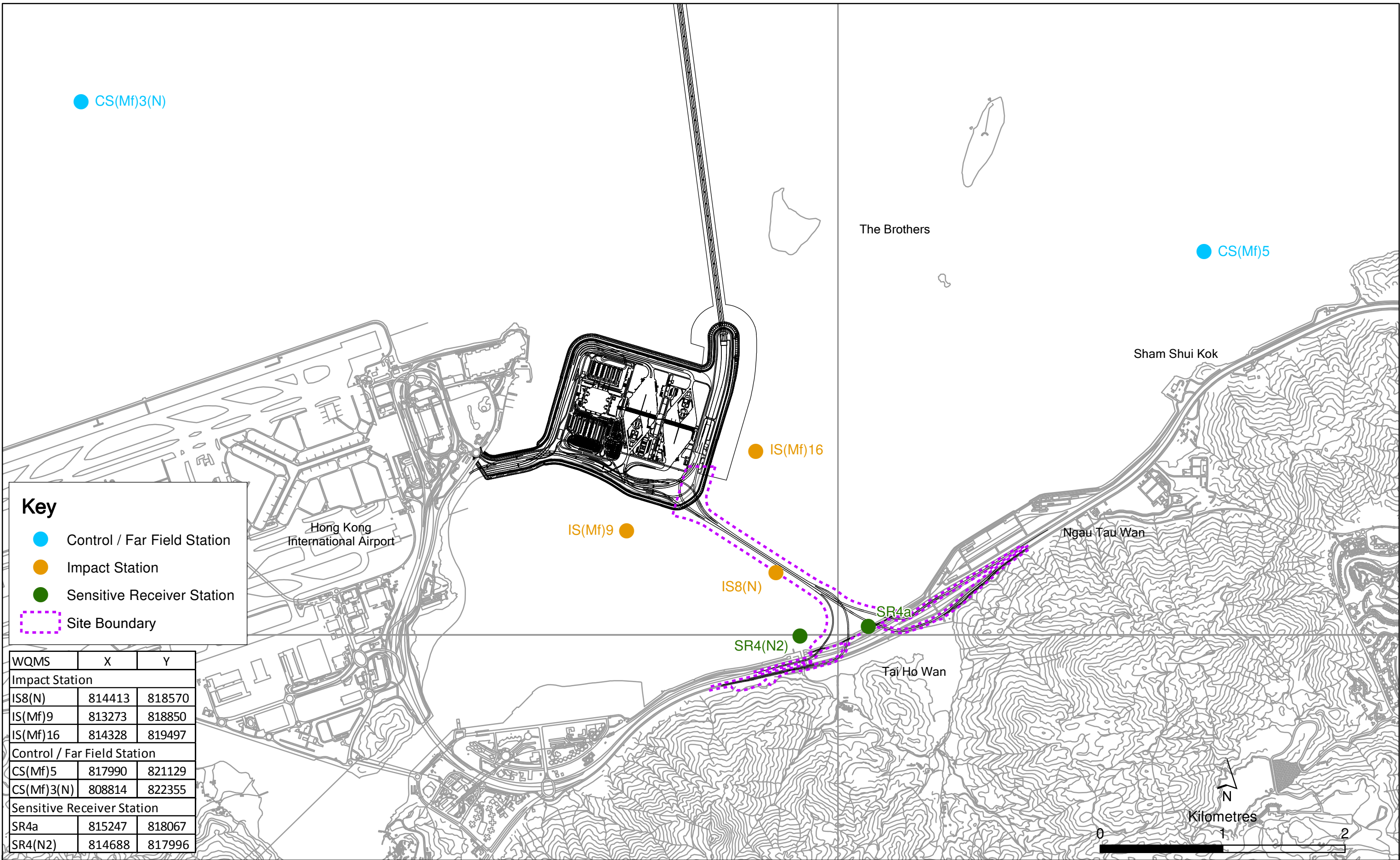
**Notification of Exceedance**

<b>Log No.</b>	<u>Action Level Exceedance</u> 0212330_12 July 2019_ Bottom DO_E_Station IS(Mf)16 0212330_12 July 2019_ Bottom DO_E_Station SR4a [Total No. of Exceedance = 2]	
<b>Date</b>	12 July 2019 (Measured) 6 August (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<u>Action Level Exceedance</u> 1. Mid-ebb at IS(Mf)16 (Bottom-depth DO = 4.4 mg/L) 2. Mid-ebb at SR4a (Bottom-depth DO = 4.4 mg/L)	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 12 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 12 July 2019.</li> <li>• Apart from bottom-depth DO exceedance at IS(Mf)16 and SR4a during mid-ebb, levels of DO at all monitoring stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day.</li> <li>• The DO pattern at IS(Mf)16 and SR4a was similar to the control station where the bottom-depth DO levels were generally lower.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 12 July 2019 and locations of water quality monitoring stations are attached.	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Surface	1	1	28.7	7.8	12.3	5.1	4.6	4.3	3.9	2.8	2.8
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Surface	1	2	28.2	7.9	12.8	5.1		4.3		3.2	
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Middle	2	1	27.8	7.8	18.9	4.1		2.8		2.9	
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Middle	2	2	27.3	7.8	19.4	4.2	2.7	2.6			
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Bottom	3	1	26.0	7.8	27.9	2.9	4.7	4.0			
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)5	8:55	Bottom	3	2	25.5	7.8	28.4	3.1	3.0	4.7	4.2		
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Surface	1	1	29.4	7.9	9.1	5.7	5.3	4.3	4.3	2.8	3.0
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Surface	1	2	28.8	8.0	9.4	5.8		4.3		3.0	
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Middle	2	1	28.8	7.8	13.4	4.7		3.4		3.2	
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Middle	2	2	28.2	8.0	13.7	4.8	3.6	2.9			
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Bottom	3	1	27.9	7.7	21.6	3.5	3.4	5.2		3.0	
HY/2012/08	2019/07/12	Mid-Ebb	CS(Mf)3(N)	10:08	Bottom	3	2	27.2	7.9	22.3	3.3	3.4	4.8	2.8		
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Surface	1	1	29.1	7.9	13.7	5.6	5.6	3.8	5.9	3.9	4.8
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Surface	1	2	28.6	8.1	14.1	5.6		3.8		3.7	
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Bottom	3	1	28.2	7.8	20.1	4.4	4.4	7.8		5.8	
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)16	10:42	Bottom	3	2	27.4	8.0	21.0	4.4	4.4	8.0	5.6		
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Surface	1	1	28.9	7.9	13.4	5.2	5.2	5.1	6.1	6.3	6.9
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Surface	1	2	28.3	8.0	13.8	5.2		5.1		6.3	
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Bottom	3	1	28.5	7.8	15.7	4.3	4.4	6.9		7.3	
HY/2012/08	2019/07/12	Mid-Ebb	SR4a	10:53	Bottom	3	2	28.1	8.0	16.1	4.4	4.4	7.1	7.1		
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Surface	1	1	28.9	7.8	13.9	5.0	5.1	7.0	8.1	9.1	11.5
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Surface	1	2	28.3	8.0	14.2	5.1		7.1		8.7	
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Bottom	3	1	28.8	7.8	14.4	4.9	4.9	9.1		14.0	
HY/2012/08	2019/07/12	Mid-Ebb	SR4(N2)	10:57	Bottom	3	2	28.2	8.0	14.8	4.9	4.9	9.1	14.3		
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Surface	1	1	29.3	7.9	12.9	5.8	5.9	3.1	3.7	3.6	4.0
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Surface	1	2	28.7	8.1	13.2	5.9		3.1		3.9	
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Bottom	3	1	29.1	7.9	13.5	5.8	5.8	4.2		4.2	
HY/2012/08	2019/07/12	Mid-Ebb	IS8(N)	11:05	Bottom	3	2	28.6	8.1	13.8	5.8	5.8	4.2	4.1		
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Surface	1	1					5.2		6.4		2.5
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Surface	1	2									
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Middle	2	1	29.0	7.9	14.2	5.2		6.3		3.6	
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Middle	2	2	28.4	8.0	14.5	5.2	6.4	3.7			
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Bottom	3	1					N/A				
HY/2012/08	2019/07/12	Mid-Ebb	IS(Mf)9	11:13	Bottom	3	2					N/A				

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Surface	1	1	29.9	8.0	10.5	6.1	4.6	3.1	2.9	3.8	4.0
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Surface	1	2	29.3	8.1	10.8	6.2		3.2		3.6	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Middle	2	1	27.2	7.8	22.6	3.0		2.7		4.0	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Middle	2	2	26.7	8.0	23.4	3.1	2.2	2.7	2.9	3.6	4.0
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Bottom	3	1	25.6	7.8	30.1	2.1		3.0		4.3	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)5	16:59	Bottom	3	2	25.0	8.0	31.2	2.2	5.6	2.9	6.9	4.4	7.0
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Surface	1	1	30.3	7.9	3.5	6.4		9.2		7.3	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Surface	1	2	29.7	8.1	3.6	6.4		9.1		6.7	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Middle	2	1	29.2	7.7	10.0	4.8	4.4	5.5	6.9	6.7	7.0
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Middle	2	2	28.6	7.9	10.3	4.8		5.7		7.0	
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Bottom	3	1	28.8	7.7	13.7	4.3	6.3	5.7	8.2	7.2	8.4
HY/2012/08	2019/07/12	Mid-Flood	CS(Mf)3(N)	16:06	Bottom	3	2	28.1	7.9	14.0	4.4		5.9		7.1	
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Surface	1	1	29.6	8.0	12.6	6.3	6.3	5.6	8.2	5.6	8.4
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Surface	1	2	29.1	8.1	13.0	6.3		5.5		5.9	
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Middle	2	2					5.9		8.2		8.4
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Bottom	3	1	29.3	7.9	13.8	5.9		10.8		11.1	
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)16	15:28	Bottom	3	2	28.7	8.1	14.2	5.9	6.7	10.9	3.9	11.0	6.0
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Surface	1	1	29.9	8.0	12.3	6.6		3.1		4.4	
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Surface	1	2	29.3	8.1	12.6	6.7		3.2		4.4	
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Middle	2	1					6.7		3.9		6.0
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Bottom	3	1	28.9	7.8	15.0	5.2	5.2	4.6	3.9	6.6	6.0
HY/2012/08	2019/07/12	Mid-Flood	SR4a	15:16	Bottom	3	2	28.3	8.0	15.5	5.2		4.7		7.0	
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Surface	1	1	29.3	8.0	13.6	6.4	6.5	2.5	3.6	7.4	13.5
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Surface	1	2	28.7	8.1	14.0	6.5		2.5		7.1	
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Middle	2	1									
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Middle	2	2					6.4		3.6		13.5
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Bottom	3	1	29.3	8.0	13.7	6.4		4.9		19.7	
HY/2012/08	2019/07/12	Mid-Flood	SR4(N2)	15:07	Bottom	3	2	28.7	8.0	14.1	6.4	6.1	4.6	3.9	19.9	5.1
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Surface	1	1	29.7	7.9	12.1	6.1		3.1		4.2	
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Surface	1	2	29.2	8.1	12.5	6.1		3.2		4.3	
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Middle	2	1					6.1		3.9		5.1
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Middle	2	2									
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Bottom	3	1	29.7	7.9	12.5	6.2	6.2	4.7	3.9	5.8	5.1
HY/2012/08	2019/07/12	Mid-Flood	IS8(N)	14:56	Bottom	3	2	29.2	8.1	12.8	6.2		4.5		6.2	
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Surface	1	1					5.5		7.4		2.9
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Surface	1	2									
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Middle	2	1	29.1	7.9	14.8	5.4		7.4		4.3	
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Middle	2	2	28.5	8.1	15.2	5.5	N/A	7.3	7.4	4.1	2.9
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Bottom	3	1									
HY/2012/08	2019/07/12	Mid-Flood	IS(Mf)9	14:47	Bottom	3	2					N/A		7.4	4.1	2.9

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

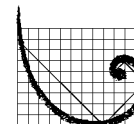
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 7 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance  
0215660\_17 July 2019\_Bottom DO\_E\_Station SR4(N2)

A total of one exceedance was recorded on 17 July 2019.

Regards,



Dr Jasmine Ng  
*Environmental Team Leader*

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

**Notification of Exceedance**

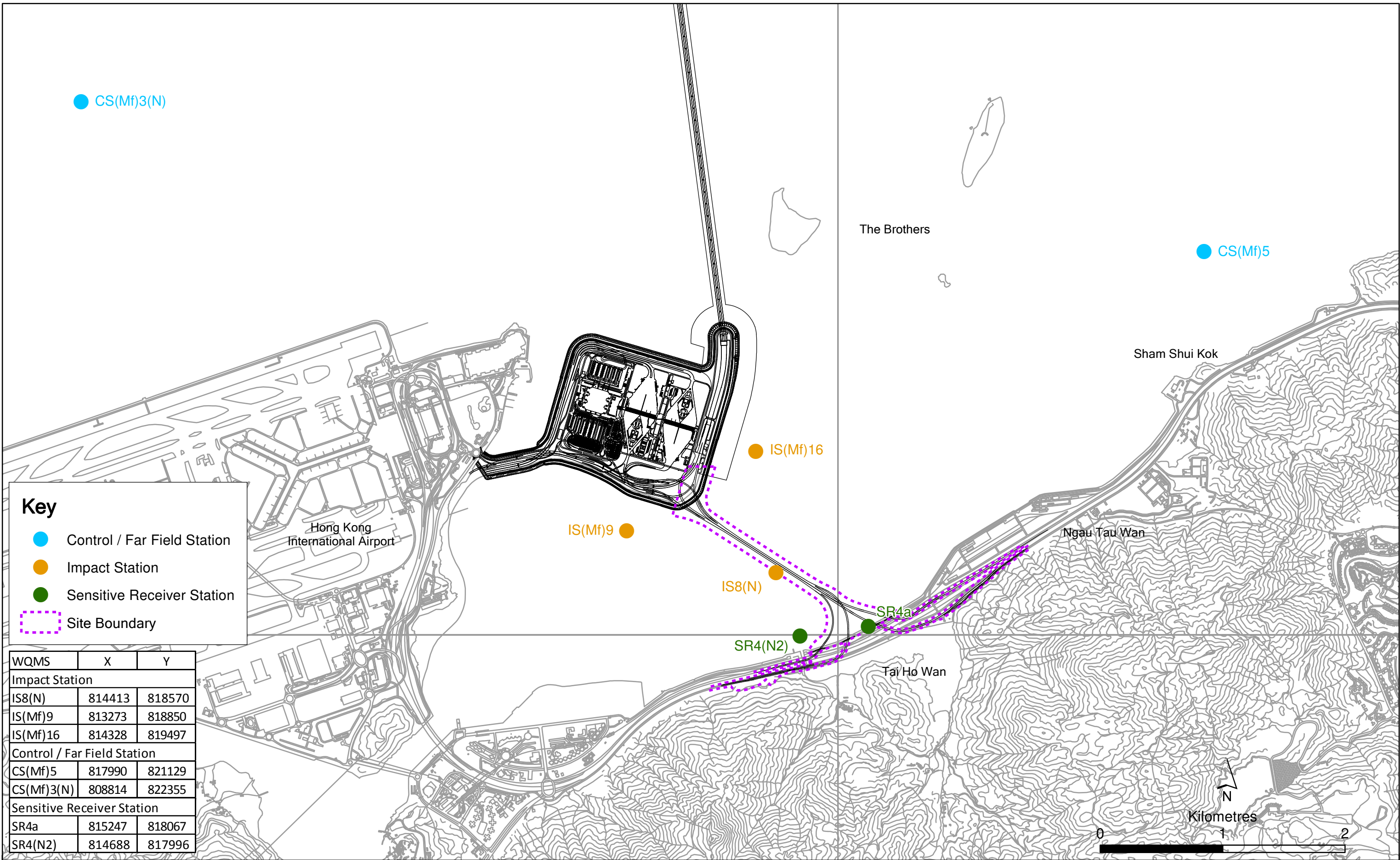
<b>Log No.</b>	<u>Action Level Exceedance</u> 0212330_17 July 2019_ Bottom DO_E_Station SR4(N2) [Total No. of Exceedance = 1]	
<b>Date</b>	17 July 2019 (Measured) 6 August (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<u>Action Level Exceedance</u> 1. Mid-ebb at SR4(N2) (Bottom-depth DO = 4.5 mg/L)	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 17 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 17 July 2019.</li> <li>• Apart from bottom-depth DO exceedance at SR4(N2) during mid-ebb, levels of DO at all monitoring stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day.</li> <li>• The DO pattern at SR4(N2) was similar to the control station where the bottom-depth DO levels were generally lower.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 17 July 2019 and locations of water quality monitoring stations are attached.	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Surface	1	1	28.5	7.9	18.7	6.5	5.9	3.0	5.5	7.2	4.9
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Surface	1	2	27.9	7.9	18.7	6.4		4.1		7.0	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Middle	2	1	28.1	7.9	19.3	5.4		4.9		5.4	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Middle	2	2	27.5	7.9	19.7	5.3		5.7		5.7	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Bottom	3	1	25.6	7.7	28.4	3.5	3.6	7.4		4.7	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)5	13:40	Bottom	3	2	25.0	7.7	29.2	3.6		8.0		4.3	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Surface	1	1	29.9	8.0	11.6	6.3	6.2	2.2	4.1	5.1	4.5
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Surface	1	2	29.3	8.0	11.9	6.3		2.4		4.6	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Middle	2	1	29.7	8.0	12.2	6.1		3.4		4.2	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Middle	2	2	29.1	8.0	12.6	6.0		3.4		4.5	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Bottom	3	1	27.0	7.9	22.9	3.7	3.8	6.6		4.7	
HY/2012/08	2019/07/17	Mid-Ebb	CS(Mf)3(N)	12:53	Bottom	3	2	26.4	7.9	23.6	3.8		6.6		4.0	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Surface	1	1	29.5	8.0	14.4	7.6	7.6	4.7	5.9	4.7	5.7
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Surface	1	2	28.9	8.0	14.8	7.5		5.6		5.0	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Bottom	3	1	27.9	7.8	19.6	5.4	5.4	6.2		6.2	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)16	12:09	Bottom	3	2	27.3	7.8	20.1	5.4		7.1		7.0	
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Surface	1	1	28.9	7.8	14.7	6.2	6.2	3.0	6.2	6.1	5.3
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Surface	1	2	28.3	7.8	15.1	6.1		4.0		5.5	
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Bottom	3	1	27.6	7.7	20.7	4.7	4.8	8.5		5.5	
HY/2012/08	2019/07/17	Mid-Ebb	SR4a	11:59	Bottom	3	2	27.0	7.7	21.2	4.8		9.3		4.9	
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Surface	1	1	28.5	7.7	16.6	5.3	5.3	11.5	13.4	5.7	4.9
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Surface	1	2	27.9	7.7	17.1	5.2		12.3		5.4	
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Bottom	3	1	27.6	7.7	20.8	4.5	4.5	15.8		4.3	
HY/2012/08	2019/07/17	Mid-Ebb	SR4(N2)	11:55	Bottom	3	2	27.0	7.7	21.4	4.5		14.1		4.0	
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Surface	1	1	29.6	8.1	14.2	8.3	8.3	7.1	10.3	6.4	5.1
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Surface	1	2	29.0	8.1	14.6	8.2		7.9		6.1	
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Bottom	3	1	28.1	7.8	18.6	5.4	5.5	12.9		3.6	
HY/2012/08	2019/07/17	Mid-Ebb	IS8(N)	11:48	Bottom	3	2	27.6	7.8	18.9	5.5		13.3		4.1	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Surface	1	1	29.6	8.0	13.1	8.1	8.1	4.5	6.5	5.8	4.1
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Surface	1	2	29.0	8.0	13.5	8.1		5.5		6.0	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Bottom	3	1	29.1	7.9	14.7	7.1	N/A	7.8		4.3	
HY/2012/08	2019/07/17	Mid-Ebb	IS(Mf)9	11:42	Bottom	3	2	28.5	7.9	15.1	7.2		8.2		4.7	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Surface	1	1	29.1	8.0	11.6	5.9	5.5	4.0	11.6	4.6	4.3
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Surface	1	2	28.5	8.0	11.9	5.8		4.7		4.4	
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Middle	2	1	27.5	8.0	21.7	5.2		3.2		4.1	
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Middle	2	2	26.9	8.0	22.3	5.2	3.2	4.2			
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Bottom	3	1	25.2	7.8	30.0	3.2	29.7	4.1			
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)5	5:38	Bottom	3	2	24.6	7.8	30.9	3.3	24.8	4.3			
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Surface	1	1	28.8	7.8	9.5	5.2	3.8	5.6	5.5	7.0	
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Surface	1	2	28.2	7.8	9.9	5.2	4.7		5.8		
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Middle	2	1	28.9	7.8	10.4	5.3	4.3		7.0		
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Middle	2	2	28.3	7.8	10.7	5.2	5.1		6.8		
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Bottom	3	1	28.1	7.8	17.0	4.3	7.6		8.6		
HY/2012/08	2019/07/17	Mid-Flood	CS(Mf)3(N)	6:27	Bottom	3	2	27.5	7.8	17.5	4.4	8.1		8.2		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Surface	1	1	29.1	8.1	13.6	6.5	3.6	6.5	4.2	3.9	
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Surface	1	2	28.5	8.1	14.2	6.5	4.5		4.9		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Bottom	3	1	28.2	7.9	17.5	5.0	6.7		3.6		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)16	7:10	Bottom	3	2	27.6	7.9	17.9	5.0	7.3		3.0		
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Surface	1	1	29.0	8.0	12.5	6.1	3.5	6.1	4.1	3.7	
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Surface	1	2	28.4	8.0	12.9	6.0	4.5		3.7		
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Bottom	3	1	28.5	7.9	15.5	5.1	5.0		3.5		
HY/2012/08	2019/07/17	Mid-Flood	SR4a	7:20	Bottom	3	2	28.0	7.9	16.0	5.1	5.0		3.9		
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Surface	1	1	29.1	8.0	13.1	6.0	4.0	6.0	4.1	3.8	
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Surface	1	2	28.5	8.0	13.4	5.9	4.6		4.0		
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Bottom	3	1	28.6	7.9	15.9	4.8	5.0		3.2		
HY/2012/08	2019/07/17	Mid-Flood	SR4(N2)	7:25	Bottom	3	2	28.0	7.9	16.3	4.9	5.7		3.8		
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Surface	1	1	29.1	8.0	12.0	6.5	3.4	6.5	3.8	4.2	
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Surface	1	2	28.5	8.0	12.4	6.4	4.5		4.4		
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Bottom	3	1	28.7	7.9	14.9	5.5	7.9		4.3		
HY/2012/08	2019/07/17	Mid-Flood	IS8(N)	7:31	Bottom	3	2	28.1	7.9	15.3	5.5	8.6		4.1		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Surface	1	1	29.0	8.0	12.9	6.4	5.9	6.4	4.6	3.7	
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Surface	1	2	28.4	8.0	13.2	6.4	5.7		4.5		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Middle	2	1									
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Middle	2	2									
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Bottom	3	1	28.9	8.0	14.0	6.0	6.3		5.4		
HY/2012/08	2019/07/17	Mid-Flood	IS(Mf)9	7:39	Bottom	3	2	28.2	8.0	14.4	6.0	6.4		5.1		

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level





**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

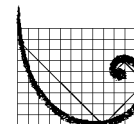
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 7 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance  
0215660\_19 July 2019\_Bottom DO\_E\_Station SR4(N2)

A total of one exceedance was recorded on 19 July 2019.

Regards,



Dr Jasmine Ng  
*Environmental Team Leader*

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

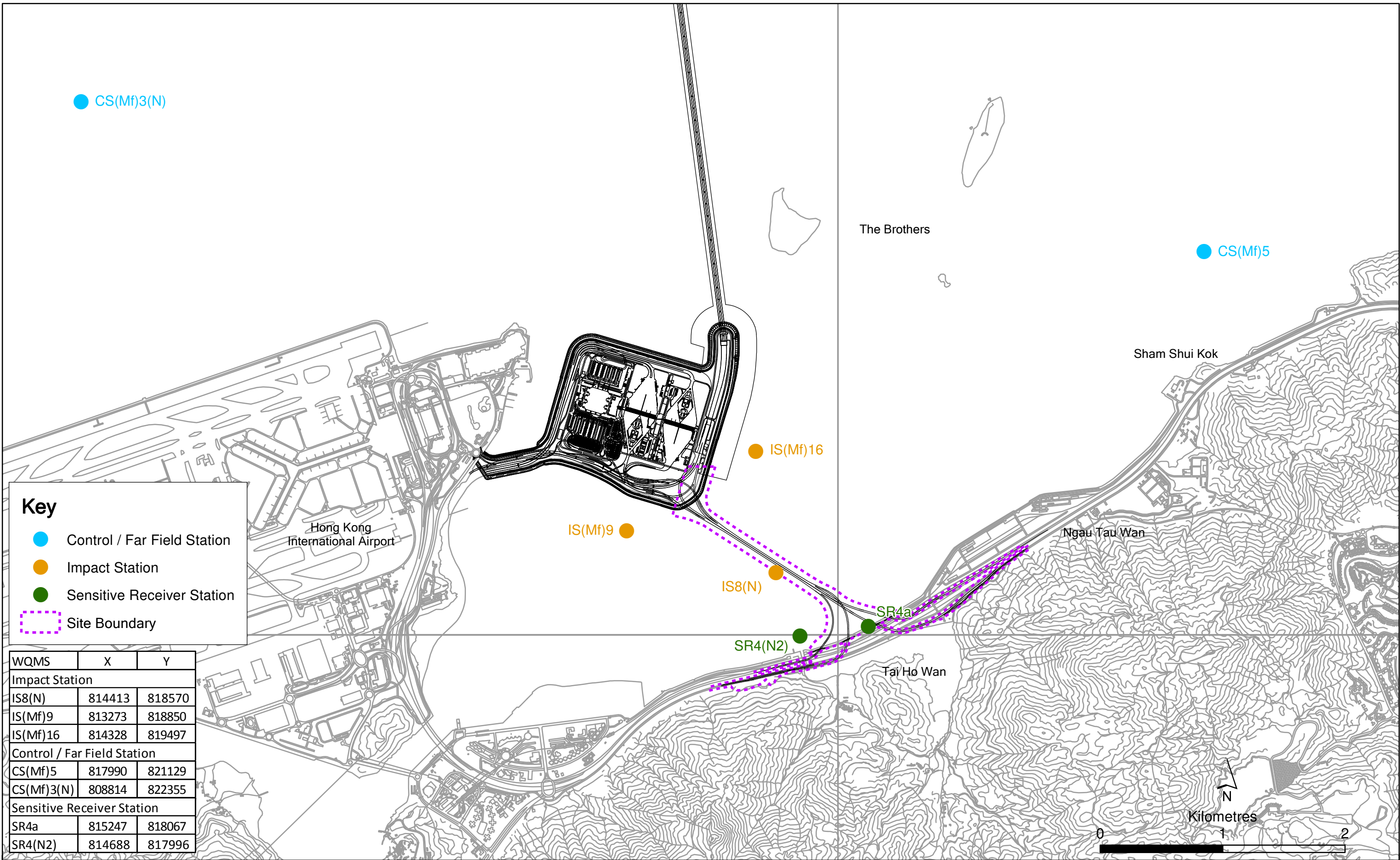
**Notification of Exceedance**

<b>Log No.</b>	<u>Action Level Exceedance</u> 0212330_19 July 2019_ Bottom DO_E_Station SR4(N2) [Total No. of Exceedance = 1]	
<b>Date</b>	19 July 2019 (Measured) 7 August (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<u>Action Level Exceedance</u> 1. Mid-ebb at SR4(N2) (Bottom-depth DO = 4.4 mg/L)	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 19 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 19 July 2019.</li> <li>• Apart from bottom-depth DO exceedance at SR4(N2) during mid-ebb, levels of DO at all monitoring stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day.</li> <li>• The DO pattern at SR4(N2) was similar to the control station where the bottom-depth DO levels were generally lower.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 19 July 2019 and locations of water quality monitoring stations are attached.	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Surface	1	1	28.6	8.0	16.5	5.8	4.9	3.1	6.2	5.3	5.8
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Surface	1	2	28.0	8.0	16.9	5.8		3.2		5.0	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Middle	2	1	26.7	7.9	24.3	3.9		6.7		6.1	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Middle	2	2	26.1	7.9	25.0	3.9	3.9	6.6	6.2	5.9	5.8
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Bottom	3	1	25.3	7.9	29.6	3.8		8.9		9.2	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)5	14:52	Bottom	3	2	24.8	7.9	30.3	4.0	5.3	8.8	3.3	9.4	5.0
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Surface	1	1	29.2	8.0	12.9	6.2		2.2		4.0	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Surface	1	2	28.6	8.0	13.3	6.1		2.5		4.4	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Middle	2	1	27.6	7.9	20.1	4.4	4.1	3.2	6.2	4.7	9.8
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Middle	2	2	27.0	7.9	20.8	4.4		4.4		5.8	
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Bottom	3	1	27.5	7.9	23.3	4.0	6.0	4.4	6.2	6.1	9.8
HY/2012/08	2019/07/19	Mid-Ebb	CS(Mf)3(N)	14:13	Bottom	3	2	27.0	7.9	23.9	4.1		4.1		6.1	
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)16	13:24	Surface	1	1	28.8	8.1	18.0	5.9	5.0	6.5	6.2	9.0	9.8
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)16	13:24	Surface	1	2	28.3	8.1	18.2	6.1		6.5		8.7	
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)16	13:24	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)16	13:24	Middle	2	2					5.7	5.9	5.5	10.8	9.2
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)16	13:24	Bottom	3	1	27.2	8.0	23.1	4.9		5.9		10.7	
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Surface	1	1	28.6	8.0	17.9	5.7	5.7	4.4	6.2	5.4	9.2
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Surface	1	2	28.1	8.0	18.3	5.7		4.5		5.2	
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Middle	2	2					4.5	6.6	7.4	11.0	9.3
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Bottom	3	1	28.1	8.0	22.1	4.5		6.6		11.3	
HY/2012/08	2019/07/19	Mid-Ebb	SR4a	13:15	Bottom	3	2	27.5	8.0	22.9	4.5	6.3	6.6	6.2	6.5	9.3
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Surface	1	1	29.2	8.0	16.1	6.3		4.3		6.8	
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Surface	1	2	28.7	8.1	16.5	6.3		4.4		6.8	
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Middle	2	1					4.4		6.2		9.3
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Bottom	3	1	27.8	7.9	20.2	4.4	6.6	10.4	10.6	11.6	16.7
HY/2012/08	2019/07/19	Mid-Ebb	SR4(N2)	13:11	Bottom	3	2	27.2	7.9	20.8	4.4		10.4		12.1	
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Surface	1	1	28.9	8.2	17.6	6.6	6.6	8.6	6.2	14.4	16.7
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Surface	1	2	28.3	8.2	18.1	6.5		8.9		13.9	
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Middle	2	2					5.3		6.2		16.7
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Bottom	3	1	28.1	8.0	21.0	5.3		12.5		19.4	
HY/2012/08	2019/07/19	Mid-Ebb	IS8(N)	13:04	Bottom	3	2	27.6	8.0	21.3	5.3	6.6	12.5	7.6	19.1	5.2
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Surface	1	1	28.9	8.1	16.5	6.6		4.2		5.0	
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Surface	1	2	28.3	8.1	17.0	6.5		4.6		5.3	
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Middle	2	1					5.7		6.2		5.2
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Bottom	3	1	28.6	8.0	17.8	5.6	5.7	10.8	6.2	10.4	5.2
HY/2012/08	2019/07/19	Mid-Ebb	IS(Mf)9	12:57	Bottom	3	2	28.0	8.0	18.5	5.7		10.8		10.1	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Surface	1	1	28.4	8.0	16.3	5.2	4.4	4.1	5.6	4.6	4.3
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Surface	1	2	27.8	7.9	16.8	5.1		4.1		4.4	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Middle	2	1	26.4	7.9	25.6	3.7		3.5		4.1	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Middle	2	2	25.8	7.9	26.4	3.7		3.5		4.2	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Bottom	3	1	25.1	7.9	30.3	3.5	3.6	9.2	4.3	4.1	4.3
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)5	7:17	Bottom	3	2	24.5	7.9	31.2	3.6		9.2		4.3	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Surface	1	1	28.8	7.9	11.2	5.1	5.1	3.8	6.6	5.5	7.0
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Surface	1	2	28.2	7.9	11.5	5.1		4.0		5.8	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Middle	2	1	28.5	7.9	14.6	5.0		3.9		7.0	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Middle	2	2	27.9	7.9	15.0	5.0		4.2		6.8	
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Bottom	3	1	27.6	7.9	20.8	4.3	4.3	11.8	4.3	8.6	3.9
HY/2012/08	2019/07/19	Mid-Flood	CS(Mf)3(N)	8:06	Bottom	3	2	27.0	7.9	21.3	4.2		11.6		8.2	
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Surface	1	1	28.4	8.0	17.2	5.7	5.7	10.0	11.2	4.2	3.9
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Surface	1	2	27.8	8.0	17.7	5.6		10.3		4.9	
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Bottom	3	1	28.4	8.0	20.2	5.0	5.1	12.3	4.3	3.6	3.7
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)16	8:51	Bottom	3	2	27.7	8.0	20.8	5.1		12.0		3.0	
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Surface	1	1	28.8	8.0	15.1	5.8	5.8	4.3	5.9	4.1	3.7
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Surface	1	2	28.2	8.0	15.6	5.7		4.5		3.7	
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Bottom	3	1	28.0	7.9	18.9	4.7	4.8	7.2	4.3	3.5	3.8
HY/2012/08	2019/07/19	Mid-Flood	SR4a	8:58	Bottom	3	2	27.4	7.9	19.5	4.8		7.7		3.9	
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Surface	1	1	28.5	8.0	16.7	5.4	5.4	6.3	8.9	4.1	3.8
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Surface	1	2	27.9	8.0	17.2	5.4		6.5		4.0	
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Bottom	3	1	28.5	8.0	18.0	5.1	5.2	11.5	5.0	3.2	4.2
HY/2012/08	2019/07/19	Mid-Flood	SR4(N2)	9:06	Bottom	3	2	27.9	8.0	18.5	5.2		11.1		3.8	
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Surface	1	1	28.8	8.1	15.7	6.2	6.2	3.2	5.0	3.8	4.2
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Surface	1	2	28.2	8.1	16.1	6.2		3.4		4.4	
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Bottom	3	1	28.2	8.0	17.9	5.0	5.0	6.9	4.5	4.3	3.7
HY/2012/08	2019/07/19	Mid-Flood	IS8(N)	9:11	Bottom	3	2	27.6	7.9	18.4	5.0		6.4		4.1	
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Surface	1	1	28.6	8.0	15.7	5.6	5.6	4.3	4.5	4.6	3.7
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Surface	1	2	28.0	8.0	16.1	5.5		4.5		4.5	
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Middle	2	1									
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Middle	2	2									
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Bottom	3	1	28.4	8.0	17.1	5.5	5.5	4.7	4.5	5.4	3.7
HY/2012/08	2019/07/19	Mid-Flood	IS(Mf)9	9:19	Bottom	3	2	27.8	8.0	17.7	5.5		4.5		5.1	

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

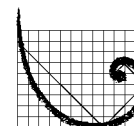
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 9 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

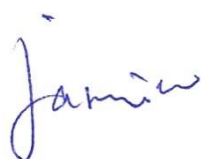
Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance

0215660\_22 July 2019\_ Bottom DO\_E\_Station IS(Mf)16  
0215660\_22 July 2019\_ Surface & Middle DO\_E\_Station SR4a  
0215660\_22 July 2019\_ Bottom DO\_E\_Station SR4a  
0215660\_22 July 2019\_ Bottom DO\_E\_Station SR4(N2)  
0215660\_22 July 2019\_ Bottom DO\_E\_Station IS8(N)  
0215660\_22 July 2019\_ Surface & Middle DO\_F\_Station IS(Mf)16  
0215660\_22 July 2019\_ Bottom DO\_F\_Station IS(Mf)16  
0215660\_22 July 2019\_ Bottom DO\_F\_Station SR4a  
0215660\_22 July 2019\_ Surface & Middle DO\_F\_Station SR4(N2)  
0215660\_22 July 2019\_ Bottom DO\_F\_Station SR4(N2)

A total of ten (10) exceedances were recorded on 22 July 2019.

Regards,



Dr Jasmine Ng  
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

**Notification of Exceedance**

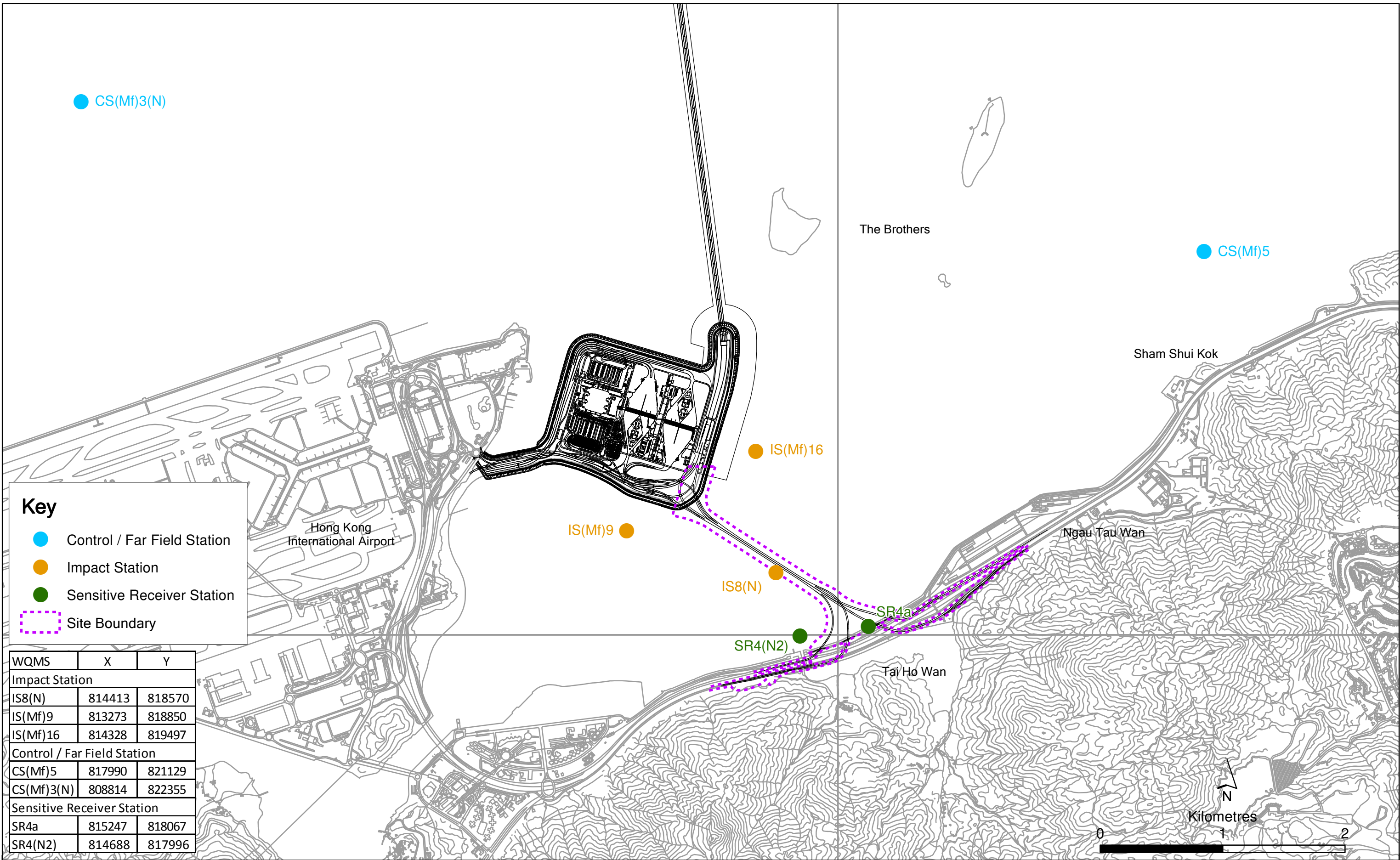
Log No.	<p style="text-align: center;"><u>Action Level Exceedance</u>            0215660_22 July 2019_ Bottom DO_E_Station IS(Mf)16            0215660_22 July 2019_ Surface &amp; Middle DO_E_Station SR4a            0215660_22 July 2019_ Bottom DO_E_Station SR4a            0215660_22 July 2019_ Bottom DO_E_Station SR4(N2)            0215660_22 July 2019_ Bottom DO_E_Station IS8(N)            0215660_22 July 2019_ Surface &amp; Middle DO_F_Station IS(Mf)16            0215660_22 July 2019_ Bottom DO_F_Station IS(Mf)16            0215660_22 July 2019_ Bottom DO_F_Station SR4a            0215660_22 July 2019_ Surface &amp; Middle DO_F_Station SR4(N2)            0215660_22 July 2019_ Bottom DO_F_Station SR4(N2)            [Total No. of Exceedance = 10]</p>	
Date	<p style="text-align: center;">22 July 2019 (Measured) 7 August (Results obtained from ENPO Website)</p>	
Monitoring Station	<p style="text-align: center;">CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)</p>	
Parameter(s) with Exceedance(s)	<p style="text-align: center;">Bottom-depth Dissolved Oxygen (DO)</p>	
Action Levels for DO	Surface and Middle-depth DO	5.0 mg/L
	Bottom-depth DO	4.7 mg/L
Limit Levels for DO	Surface and Middle-depth DO	4.2 mg/L
	Bottom-depth DO	3.6 mg/L
Measured Levels	<p><u>Action Level Exceedance</u></p> <ol style="list-style-type: none"> <li>1. Mid-ebb at IS(Mf)16 (Bottom-depth DO = 4.1 mg/L)</li> <li>2. Mid-ebb at SR4a (Surface and Middle-depth DO = 4.7 mg/L)</li> <li>3. Mid-ebb at SR4a (Bottom-depth DO = 4.1 mg/L)</li> <li>4. Mid-ebb at SR4(N2) (Bottom-depth DO = 4.4 mg/L)</li> <li>5. Mid-ebb at IS8(N) (Bottom-depth DO = 3.9 mg/L)</li> <li>6. Mid-flood at IS(Mf)16 (Surface and Middle-depth DO = 4.8 mg/L)</li> <li>7. Mid-flood at IS(Mf)16 (Bottom-depth DO = 4.3 mg/L)</li> <li>8. Mid-flood at SR4a (Bottom-Depth DO = 4.2 mg/L)</li> <li>9. Mid-flood at SR4(N2) (Surface and Middle-depth DO = 4.8 mg/L)</li> <li>10. Mid-flood at SR4(N2) (Bottom-Depth DO = 4.1 mg/L)</li> </ol>	
Works Undertaken (at the time of monitoring event)	<p>No marine works were undertaken on 22 July 2019.</p>	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance of Surface and Middle-depth and bottom-depth DO is unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> <li>• No marine works were undertaken on 22 July 2019.</li> <li>• The DO patterns at Impact stations and sensitive receiver stations with exceedances were similar to the control station where the DO levels were generally lower.</li> </ul>	
Actions Taken/ To Be Taken	<p>No immediate action is considered necessary. The ET will monitor for future trends in exceedances.</p>	
Remarks	<p>The monitoring results on 22 July 2019 and locations of water quality monitoring stations are attached.</p>	



Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Surface	1	1	27.0	7.7	19.3	4.8	4.2	2.4	4.2	3.1	2.5
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Surface	1	2	26.7	7.7	20.9	4.8		2.3		2.8	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Middle	2	1	25.5	7.7	26.2	3.4		4.5		3.2	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Middle	2	2	25.8	7.7	27.3	3.7		4.5		3.3	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Bottom	3	1	24.7	7.6	29.9	3.3	3.3	6.1	3.3	2.8	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)5	17:48	Bottom	3	2	24.6	7.7	30.0	3.2		5.3		2.9	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Surface	1	1	27.5	7.6	14.9	4.8	4.1	2.9	8.4	4.2	5.0
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Surface	1	2	27.5	7.6	14.6	4.7		2.9		4.4	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Middle	2	1	26.0	7.6	24.0	3.5		7.8		5.0	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Middle	2	2	25.8	7.6	22.9	3.5		7.1		5.1	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Bottom	3	1	25.7	7.6	25.3	3.5	3.6	14.4	3.6	5.6	
HY/2012/08	2019/07/22	Mid-Ebb	CS(Mf)3(N)	17:03	Bottom	3	2	25.7	7.6	25.3	3.6		15.2		5.9	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Surface	1	1	27.4	7.7	18.1	5.7	5.8	3.7	4.4	4.8	4.9
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Surface	1	2	27.5	7.8	17.9	5.8		3.4		4.5	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Bottom	3	1	26.1	7.6	24.6	4.1	4.1	5.2	4.1	4.8	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)16	16:20	Bottom	3	2	26.4	7.6	23.1	4.0		5.1		5.3	
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Surface	1	1	27.1	7.6	18.8	4.6	4.7	4.6	5.1	2.9	3.6
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Surface	1	2	27.0	7.6	18.1	4.7		4.6		3.2	
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Bottom	3	1	26.7	7.6	20.9	4.1	4.1	5.6	4.1	3.8	
HY/2012/08	2019/07/22	Mid-Ebb	SR4a	16:09	Bottom	3	2	27.0	7.6	20.9	4.1		5.4		3.7	
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Surface	1	1	27.7	7.7	17.4	5.3	5.4	4.5	6.2	2.8	3.4
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Surface	1	2	27.5	7.7	16.8	5.4		5.1		3.1	
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Bottom	3	1	27.0	7.6	20.3	4.4	4.4	8.3	4.4	3.8	
HY/2012/08	2019/07/22	Mid-Ebb	SR4(N2)	16:05	Bottom	3	2	27.0	7.7	19.7	4.4		7.0		3.7	
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Surface	1	1	27.6	7.7	17.9	5.2	5.2	9.4	10.0	3.4	3.4
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Surface	1	2	27.7	7.7	17.5	5.2		8.4		3.5	
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Bottom	3	1	26.4	7.6	22.8	3.8	3.9	11.6	3.9	3.3	
HY/2012/08	2019/07/22	Mid-Ebb	IS8(N)	15:57	Bottom	3	2	26.3	7.6	22.9	3.9		10.7		3.2	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Surface	1	1	27.6	7.7	17.8	5.8	5.8	3.6	5.6	3.6	2.8
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Surface	1	2	27.6	7.7	17.7	5.8		3.6		3.8	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Bottom	3	1	27.2	7.6	19.1	4.7	4.8	7.5	4.8	3.7	
HY/2012/08	2019/07/22	Mid-Ebb	IS(Mf)9	15:50	Bottom	3	2	27.2	7.6	19.1	4.8		7.6		4.0	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Surface	1	1	26.9	7.6	19.1	4.3	4.0	2.8	2.9	3.1	3.6
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Surface	1	2	27.0	7.6	18.0	4.4		3.0		3.3	
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Middle	2	1	25.7	7.6	25.2	3.6		2.4		3.5	
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Middle	2	2	25.7	7.6	25.3	3.6	2.4	3.9			
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Bottom	3	1	24.5	7.6	30.5	3.2	3.4	3.8			
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)5	9:00	Bottom	3	2	24.6	7.6	30.5	3.3	3.3	3.4	3.7		
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Surface	1	1	27.7	7.5	9.3	5.1	4.9	4.8	5.1	3.5	4.5
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Surface	1	2	27.7	7.6	9.0	5.1		4.9		3.9	
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Middle	2	1	27.4	7.6	14.1	4.7		3.6		4.5	
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Middle	2	2	27.5	7.6	13.7	4.7	4.2	4.9			
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Bottom	3	1	26.5	7.6	21.2	4.1	4.1	6.7		5.1	
HY/2012/08	2019/07/22	Mid-Flood	CS(Mf)3(N)	9:57	Bottom	3	2	26.6	7.5	20.9	4.1	4.1	6.4	4.9		
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Surface	1	1	27.1	7.6	18.4	4.7	4.8	3.4	4.0	4.1	5.2
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Surface	1	2	27.3	7.7	17.5	4.9		3.5		4.3	
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Bottom	3	1	26.3	7.6	22.5	4.4	4.3	4.5		6.2	
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)16	10:41	Bottom	3	2	26.9	7.6	21.4	4.2	4.3	4.7	6.0		
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Surface	1	1	27.4	7.7	16.6	5.0	5.0	3.3	5.3	4.6	5.4
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Surface	1	2	27.4	7.7	16.3	5.0		3.2		4.9	
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Bottom	3	1	26.6	7.6	20.9	4.2	4.2	7.4		5.7	
HY/2012/08	2019/07/22	Mid-Flood	SR4a	10:52	Bottom	3	2	26.6	7.6	21.0	4.2	4.2	7.4	5.5		
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Surface	1	1	27.3	7.6	18.6	4.9	4.8	4.3	6.9	5.5	6.0
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Surface	1	2	27.2	7.6	17.8	4.7		4.5		5.8	
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Bottom	3	1	26.7	7.6	20.7	4.1	4.1	8.7		6.4	
HY/2012/08	2019/07/22	Mid-Flood	SR4(N2)	10:57	Bottom	3	2	26.8	7.6	20.6	4.1	4.1	10.1	6.2		
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Surface	1	1	27.6	7.7	16.2	5.3	5.3	3.5	5.0	4.2	4.5
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Surface	1	2	27.5	7.7	16.3	5.2		3.4		4.1	
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Bottom	3	1	27.1	7.6	19.0	4.8	4.8	7.0		4.8	
HY/2012/08	2019/07/22	Mid-Flood	IS8(N)	11:04	Bottom	3	2	27.3	7.7	18.5	4.8	4.8	6.2	4.9		
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Surface	1	1	27.4	7.7	17.0	5.1	5.1	3.9	4.1	4.3	3.4
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Surface	1	2	27.4	7.7	17.0	5.0		3.9		4.2	
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Middle	2	1									
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Middle	2	2									
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Bottom	3	1	27.2	7.7	17.8	4.9	4.9	4.2		4.8	
HY/2012/08	2019/07/22	Mid-Flood	IS(Mf)9	11:11	Bottom	3	2	27.2	7.7	17.6	4.9	4.9	4.4	4.5		

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations

File: T:\GIS\CONTRACT\0215660\Mxd\0215660\_WQMS.mxd  
Date: 20/7/2019

Email  
message

Environmental  
Resources  
Management

**To** Ramboll Hong Kong Limited (ENPO)

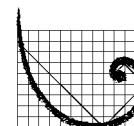
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 9 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance

0215660\_24 July 2019\_ Bottom DO\_E\_Station SR4a  
0215660\_24 July 2019\_ Bottom DO\_E\_Station IS8(N)  
0215660\_24 July 2019\_ Bottom DO\_F\_Station IS(Mf)16  
0215660\_24 July 2019\_ Bottom DO\_F\_Station SR4(N2)

A total of four (4) exceedances were recorded on 24 July 2019.

Regards,

A handwritten signature in blue ink that reads "Jasmine". The signature is written in a cursive, flowing style.

Dr Jasmine Ng  
*Environmental Team Leader*

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This facsimile transmission is intended only for the use of the addressee and is confidential. If you are not the addressee it may be unlawful for you to read, copy, distribute, disclose or otherwise use the information in this facsimile. If you are not the intended recipient, please telephone or fax us immediately.

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

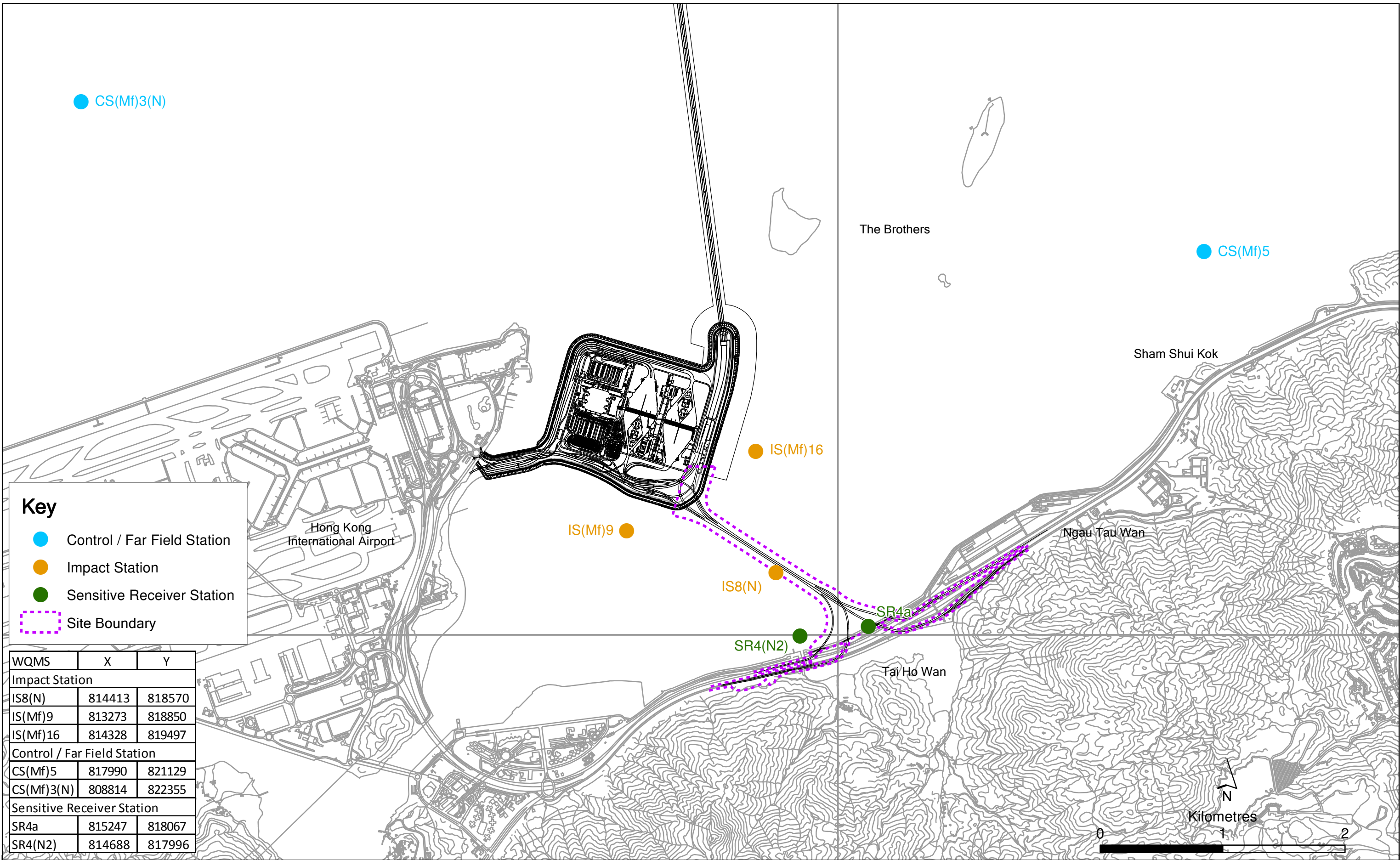
**Notification of Exceedance**

<b>Log No.</b>	<u>Action Level Exceedance</u> 0215660_24 July 2019_ Bottom DO_E_Station SR4a 0215660_24 July 2019_ Bottom DO_E_Station IS8(N) 0215660_24 July 2019_ Bottom DO_F_Station IS(Mf)16 0215660_24 July 2019_ Bottom DO_F_Station SR4(N2) [Total No. of Exceedance = 4]	
<b>Date</b>	24 July 2019 (Measured) 9 August (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8 (N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<u>Action Level Exceedance</u> 1. Mid-ebb at SR4a (Bottom-depth DO = 4.5 mg/L) 2. Mid-ebb at IS8(N) (Bottom-depth DO = 4.6 mg/L) 3. Mid-flood at IS(Mf)16 (Bottom-depth DO =4.4 mg/L ) 4. Mid-flodd at SR4(N2) (Bottom-depth DO = 4.5 mg/L)	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 24 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 24 July 2019.</li> <li>• The DO pattern at stations with exceedances were similar to the control stations where the bottom-depth DO levels were generally lower.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 24 July 2019 and locations of water quality monitoring stations are attached.	

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Surface	1	1	28.5	8.0	19.5	7.3	5.6	4.7	3.8	3.6	3.3
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Surface	1	2	28.5	8.0	19.5	7.5		4.4		3.9	
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Middle	2	1	26.4	7.8	25.2	3.9		2.0		3.8	
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Middle	2	2	25.6	7.8	26.5	3.7	2.2	3.7			
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Bottom	3	1	25.0	7.7	30.5	3.4	4.8	4.1			
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)5	17:48	Bottom	3	2	25.2	7.8	29.5	3.4	3.4	4.4	4.3		
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Surface	1	1	28.1	7.8	16.9	5.6	4.7	1.1	3.1	3.8	3.4
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Surface	1	2	28.1	7.8	17.0	5.5		1.2		3.6	
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Middle	2	1	26.7	7.7	21.7	4.0		2.8		3.1	
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Middle	2	2	26.4	7.7	23.5	3.7	2.6	3.2			
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Bottom	3	1	26.0	7.7	26.3	3.4	3.5	5.5		3.4	
HY/2012/08	2019/07/24	Mid-Ebb	CS(Mf)3(N)	17:03	Bottom	3	2	26.0	7.7	26.6	3.5	3.5	5.1	3.2		
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Surface	1	1	28.0	8.0	20.7	7.3	7.4	6.3	7.0	7.2	7.5
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Surface	1	2	28.3	8.0	20.2	7.4		6.7		7.4	
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Middle	2	1									
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Middle	2	2									
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Bottom	3	1	26.6	7.8	23.9	5.0	5.0	7.6		7.8	
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)16	16:20	Bottom	3	2	26.6	7.8	23.7	5.0	5.0	7.2	7.6		
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Surface	1	1	28.7	8.2	19.5	8.4	8.5	2.1	3.4	6.4	6.6
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Surface	1	2	28.0	8.1	20.2	8.5		2.8		6.1	
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Middle	2	1									
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Middle	2	2									
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Bottom	3	1	27.1	7.8	22.6	4.5	4.5	4.3		6.9	
HY/2012/08	2019/07/24	Mid-Ebb	SR4a	16:09	Bottom	3	2	27.0	7.8	22.8	4.4	4.5	4.3	6.7		
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Surface	1	1	28.0	8.0	20.5	7.8	7.9	3.5	4.9	5.3	5.6
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Surface	1	2	28.3	8.0	20.1	7.9		3.2		5.4	
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Middle	2	1									
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Middle	2	2									
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Bottom	3	1	27.5	7.9	21.5	5.4	5.4	6.5		6.0	
HY/2012/08	2019/07/24	Mid-Ebb	SR4(N2)	16:05	Bottom	3	2	27.3	7.8	21.9	5.3	5.4	6.2	5.6		
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Surface	1	1	28.0	8.0	20.4	6.6	6.7	6.9	7.6	8.2	8.7
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Surface	1	2	28.0	8.0	20.4	6.7		6.7		8.1	
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Middle	2	1									
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Middle	2	2									
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Bottom	3	1	26.9	7.7	23.1	4.6	4.6	8.4		9.1	
HY/2012/08	2019/07/24	Mid-Ebb	IS8(N)	15:57	Bottom	3	2	27.2	7.7	23.1	4.5	4.6	8.2	9.2		
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Surface	1	1	29.2	8.2	19.2	9.7	9.8	2.5	3.2	6.4	5.0
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Surface	1	2	28.5	8.2	19.5	9.9		3.3		6.2	
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Middle	2	1									
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Middle	2	2									
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Bottom	3	1	28.4	8.0	19.5	7.7	7.7	3.2		7.2	
HY/2012/08	2019/07/24	Mid-Ebb	IS(Mf)9	15:50	Bottom	3	2	28.1	8.0	19.7	7.6	7.7	3.6	7.1		

Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Level Code	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS	
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Surface	1	1	27.7	7.8	19.7	5.1	4.3	2.2	4.5	4.6	5.3	
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Surface	1	2	27.4	7.8	20.4	4.9		2.0		4.8		
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Middle	2	1	26.2	7.7	25.6	3.7		3.4		4.9		
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Middle	2	2	25.8	7.8	26.7	3.5		3.3		5.1		
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Bottom	3	1	25.2	7.7	29.6	3.4	3.4	8.0	1.7	6.2	4.4	
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)5	11:00	Bottom	3	2	25.3	7.7	29.5	3.4		7.9		6.4		
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)3(N)	11:44	Surface	1	1	28.2	7.7	14.7	5.2	4.7	1.4	1.7	2.9	4.4	
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)3(N)	11:44	Surface	1	2	28.2	7.7	14.6	5.1		1.8		3.2		
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)3(N)	11:44	Middle	2	1	27.5	7.7	19.5	4.3						
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)3(N)	11:44	Middle	2	2	27.4	7.7	19.5	4.2	3.7	1.8	2.7	5.7	5.3	
HY/2012/08	2019/07/24	Mid-Flood	CS(Mf)3(N)	11:44	Bottom	3	1	26.7	7.7	22.7	3.6		1.9		5.8		
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Surface	1	1	27.3	7.9	20.3	5.8	5.7	1.8	2.7	4.7	5.3	
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Surface	1	2	27.4	7.8	20.2	5.6		1.9		4.9		
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Middle	2	1						1.7		5.1		
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Middle	2	2					1.9	5.4	3.5	6.0	3.0	
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Bottom	3	1	26.6	7.8	24.0	4.4	4.5	5.8				
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)16	12:32	Bottom	3	2	27.2	7.8	23.6	4.4	4.4	4.3	2.3	3.5	2.3	3.0
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Surface	1	1	27.8	8.0	19.3	5.6	1.7	2.1				
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Surface	1	2	27.5	7.9	19.6	5.6	1.7	2.1				
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Middle	2	1					1.3	2.9				
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Middle	2	2					2.8	3.1				
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Bottom	3	1	27.8	7.8	22.3	5.3	6.7	3.3				
HY/2012/08	2019/07/24	Mid-Flood	SR4a	12:42	Bottom	3	2	27.8	7.8	22.3	5.3	6.9	3.4	2.2	3.4	3.5	
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Surface	1	1	28.2	8.0	19.0	7.1	1.6	3.3				
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Surface	1	2	28.9	8.0	18.5	7.1	1.7	2.9	3.7	8.0	9.5	
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Surface	1	2	28.9	8.0	18.5	7.1	1.7	2.9				
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Middle	2	1					1.2	3.6				
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Middle	2	2					1.4	3.8				
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Bottom	3	1	27.1	7.7	22.6	4.5	4.5	3.6	3.7	3.9	3.5	
HY/2012/08	2019/07/24	Mid-Flood	SR4(N2)	12:46	Bottom	3	2	27.3	7.7	22.2	4.5	3.4	3.6				
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Surface	1	1	27.2	7.8	21.8	5.9	6.0	3.8	3.7	8.0	9.5	
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Surface	1	2	27.9	7.9	20.3	6.0		3.7		7.7		
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Surface	1	2	27.9	7.9	20.3	6.0						
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Middle	2	1							4.4		3.7	
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Middle	2	2										
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Bottom	3	1	27.1	7.8	22.3	5.8	5.8	3.6	4.4	10.9	3.7	
HY/2012/08	2019/07/24	Mid-Flood	IS8(N)	12:51	Bottom	3	2	27.7	7.9	20.6	5.8	3.7	11.2				
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Surface	1	1	28.1	7.9	19.3	7.0	6.9	5.4	4.4	4.8	3.7	
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Surface	1	2	27.9	7.9	19.7	6.7		5.4		4.7		
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Middle	2	1							4.4		3.7	
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Middle	2	2										
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Bottom	3	1	27.8	7.9	19.9	6.1	6.2	3.3	4.4	5.1	3.7	
HY/2012/08	2019/07/24	Mid-Flood	IS(Mf)9	12:59	Bottom	3	2	27.9	7.9	19.7	6.2	3.6	5.4				

Note: Indicates Exceedance of Action Level  
Indicates Exceedance of Limit Level



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations



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**To** Ramboll Hong Kong Limited (ENPO)

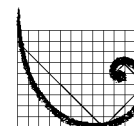
**From** ERM- Hong Kong, Limited

**Ref/Project number** Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link – Southern  
Connection Viaduct Section

**Subject** Notification of Exceedance for Marine Water  
Quality Impact Monitoring

**Date** 9 August 2019

2507,  
25/F One Harbourfront,  
18 Tak Fung Street,  
Hung Hom, Hong Kong  
Telephone: (852) 2271 3113  
Facsimile: (852) 2723 5660  
E-mail: jasmine.ng@erm.com



**ERM**

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Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following  
Log no.:

Action Level Exceedance

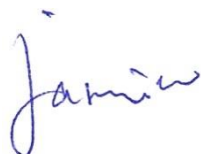
0215660\_29 July 2019\_ Bottom DO\_E\_Station SR4(N2)  
0215660\_29 July 2019\_ Bottom DO\_E\_Station IS(Mf)9  
0215660\_29 July 2019\_ Bottom DO\_F\_Station SR4a  
0215660\_29 July 2019\_ Bottom DO\_F\_Station SR4(N2)

Limit Level Exceedance

0215660\_29 July 2019\_ Bottom DO\_E\_Station IS(Mf)16  
0215660\_29 July 2019\_ Bottom DO\_E\_Station IS8(N)

A total of six (6) exceedances were recorded on 29 July 2019.

Regards,



Dr Jasmine Ng  
*Environmental Team Leader*

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –  
SOUTHERN CONNECTION VIADUCT SECTION

*Marine Water Quality Impact Monitoring*

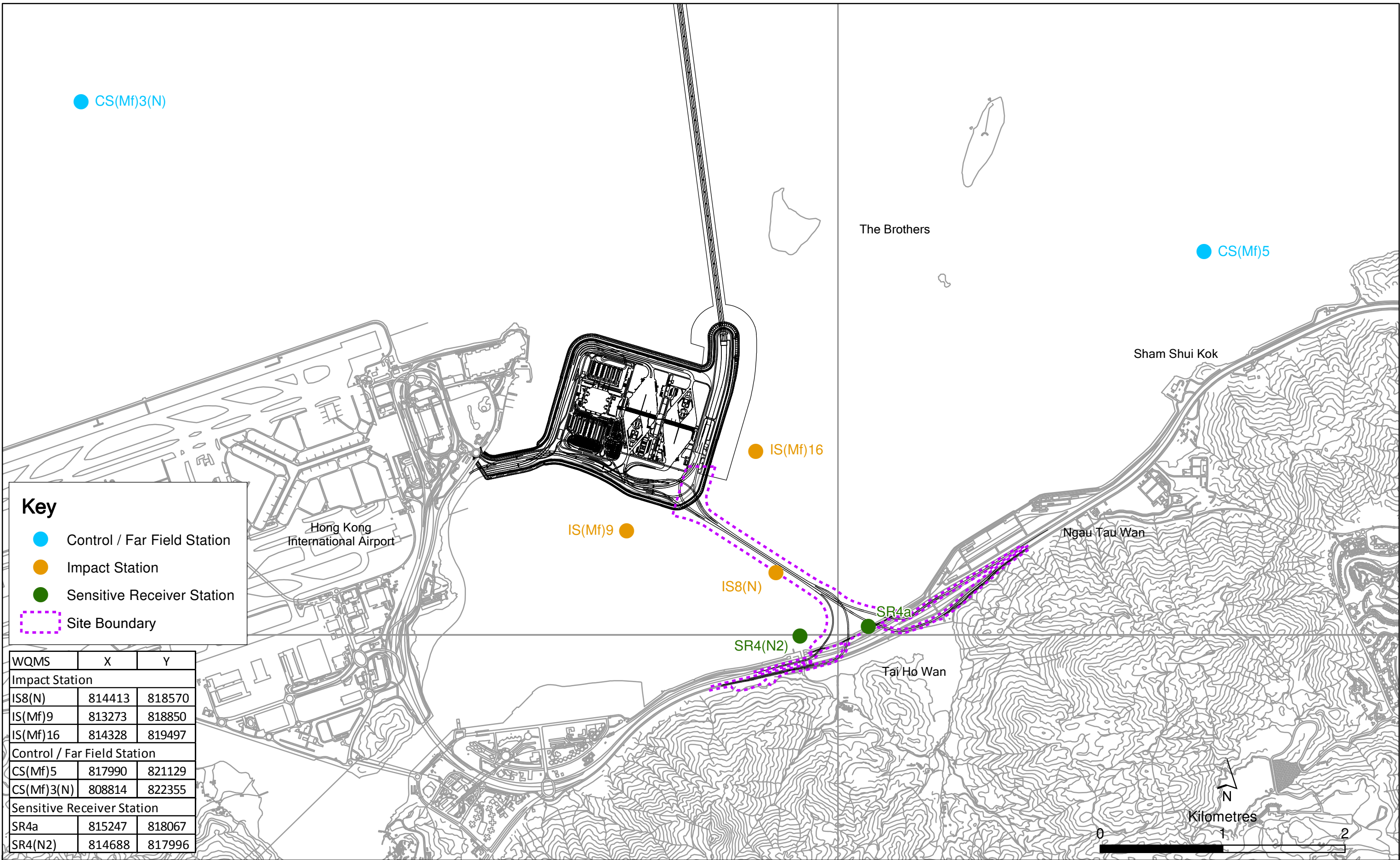
**Notification of Exceedance**

<b>Log No.</b>	<p style="text-align: center;"><u>Action Level Exceedance</u>            0215660_29 July 2019_ Bottom DO_E_Station SR4(N2)            0215660_29 July 2019_ Bottom DO_E_Station IS(Mf)9            0215660_29 July 2019_ Bottom DO_F_Station SR4a            0215660_29 July 2019_ Bottom DO_F_Station SR4(N2)</p> <p style="text-align: center;"><u>Limit Level Exceedance</u>            0215660_29 July 2019_ Bottom DO_E_station IS(Mf)16            0215660_29 July 2019_ Bottom DO_E_station IS8(N)            [Total No. of Exceedance = 6]</p>	
<b>Date</b>	29 July 2019 (Measured) 9 August (Results obtained from ENPO Website)	
<b>Monitoring Station</b>	CS(Mf)5, SR4a, SR4(N2), IS8(N), IS(Mf)16, IS(Mf)9, CS(Mf)3(N)	
<b>Parameter(s) with Exceedance(s)</b>	Bottom-depth Dissolved Oxygen (DO)	
<b>Action Levels for DO</b>	Bottom-depth DO	4.7 mg/L
<b>Limit Levels for DO</b>	Bottom-depth DO	3.6 mg/L
<b>Measured Levels</b>	<p><u>Action Level Exceedance</u></p> <ol style="list-style-type: none"> <li>1. Mid-ebb at SR(N2) (Bottom-depth DO = 4.6 mg/L)</li> <li>2. Mid-ebb at IS(Mf)9 (Bottom-depth DO = 3.9 mg/L)</li> <li>3. Mid-flood at SR4a (Bottom-depth DO = 4.2 mg/L)</li> <li>4. Mid-flood at SR4(N2) (Bottom-depth DO = 3.9 mg/L)</li> </ol> <p><u>Limit Level Exceedance</u></p> <ol style="list-style-type: none"> <li>5. Mid-ebb at IS(Mf)16 (Bottom-depth DO = 3.4 mg/L)</li> <li>6. Mid-ebb at IS8(N) (Bottom-depth DO = 3.4 mg/L)</li> </ol>	
<b>Works Undertaken (at the time of monitoring event)</b>	No marine works were undertaken on 29 July 2019.	
<b>Possible Reason for Action or Limit Level Exceedance(s)</b>	The exceedance of bottom-depth DO is unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> <li>• No marine works were undertaken on 29 July 2019.</li> <li>• The bottom-depth DO pattern at stations with exceedances were similar to the control stations where the bottom-depth DO levels were generally lower.</li> </ul>	
<b>Actions Taken/ To Be Taken</b>	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
<b>Remarks</b>	The monitoring results on 29 July 2019 and locations of water quality monitoring stations are attached.	

Project	Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Lev_Cod	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Surface	1	1	27.6	8.2	19.0	8.3	6.8	2.9	3.5	5.9	6.0
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Surface	1	2	27.7	8.2	19.0	8.4		2.9		5.8	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Middle	2	1	26.5	7.9	23.1	5.2	4.8	4.4	3.5	5.5	6.0
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Middle	2	2	26.5	7.9	23.2	5.2		4.3		6.5	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Bottom	3	1	25.6	7.9	27.5	4.8	4.8	3.3	3.5	6.7	6.0
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)5	11:01	Bottom	3	2	25.6	7.8	27.5	4.7		3.4		5.7	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Surface	1	1	27.9	8.3	17.4	8.7	5.8	2.6	5.6	5.6	6.4
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Surface	1	2	27.9	8.3	17.3	8.8		2.6		4.7	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Middle	2	1	25.2	7.7	28.0	2.9	3.1	5.5	5.6	6.5	6.4
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Middle	2	2	25.2	7.7	28.0	2.9		5.5		7.4	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Bottom	3	1	25.0	7.7	29.0	3.1	3.1	8.7	5.6	6.5	6.4
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	CS(Mf)3(N)	10:12	Bottom	3	2	25.0	7.7	29.0	3.1		8.7		7.6	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Surface	1	1	28.5	8.3	16.6	8.3	8.4	3.4	5.3	5.1	4.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Surface	1	2	28.5	8.3	16.7	8.4		3.4		5.4	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Middle	2	1					8.4		5.3		4.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Middle	2	2									
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Bottom	3	1	25.3	7.8	28.3	3.4	3.4	7.2	5.3	2.8	4.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)16	9:32	Bottom	3	2	25.3	7.8	28.3	3.4		7.2		3.5	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Surface	1	1	27.3	8.0	19.6	5.9	6.1	5.5	8.5	6.2	6.3
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Surface	1	2	27.4	8.0	19.5	6.2		5.5		5.3	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Middle	2	1					6.1		8.5		6.3
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Middle	2	2									
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Bottom	3	1	26.5	7.8	23.7	4.8	4.8	11.4	8.5	6.3	6.3
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4a	9:22	Bottom	3	2	26.5	7.8	23.7	4.7		11.4		7.3	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Surface	1	1	28.2	8.1	16.8	6.6	6.6	4.4	6.7	5.5	7.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Surface	1	2	28.2	8.1	16.8	6.6		4.3		6.4	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Middle	2	1					6.6		6.7		7.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Middle	2	2									
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Bottom	3	1	27.0	7.8	21.5	4.6	4.6	9.0	6.7	7.8	7.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	SR4(N2)	9:18	Bottom	3	2	27.1	7.8	21.5	4.6		8.9		8.7	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Surface	1	1	27.8	8.1	18.9	7.1	7.1	3.1	5.1	4.3	5.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Surface	1	2	27.8	8.1	18.8	7.1		3.1		5.3	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Middle	2	1					7.1		5.1		5.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Middle	2	2									
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Bottom	3	1	26.0	7.8	25.8	3.4	3.4	7.1	5.1	4.9	5.1
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS8(N)	9:13	Bottom	3	2	26.0	7.8	25.9	3.4		7.0		5.9	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Surface	1	1	28.6	8.4	15.5	9.3	9.3	2.5	5.0	3.2	3.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Surface	1	2	28.6	8.4	15.4	9.3		2.5		2.3	
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Middle	2	1					9.3		5.0		3.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Middle	2	2									
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Bottom	3	1	26.5	7.7	23.8	3.9	3.9	7.4	5.0	3.6	3.2
TMCLKL	HY/2012/08	2019/07/29	Mid-Ebb	IS(Mf)9	9:06	Bottom	3	2	26.4	7.7	23.8	3.9		7.4		3.6	

Project	Contract	Date (yyyy-mm-dd)	Tide	Station	Start Time	Level	Lev_Cod	Replicate	Temperature (°C)	pH	Salinity (ppt)	DO (mg/L)	Average DO (mg/L)	Turbidity (NTU)	Depth-Averaged Turbidity	SS (mg/L)	Depth-Averaged SS		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Surface	1	1	27.5	8.2	17.8	8.5	8.0	3.1	3.0	5.9	5.5		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Surface	1	2	27.6	8.2	17.8	8.6		3.1		6.6			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Middle	2	1	26.9	8.0	22.6	7.4		3.3		5.0			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Middle	2	2	26.9	8.0	22.6	7.4		3.3		5.9			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Bottom	3	1	25.5	7.9	28.1	5.7	5.7	2.5		4.3			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)5	2:33	Bottom	3	2	25.5	7.9	28.2	5.7		2.4		5.3			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Surface	1	1	27.8	8.2	15.3	7.4	6.5	3.9	5.1	4.6	5.7		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Surface	1	2	27.8	8.2	15.3	7.4		3.9		5.7			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Middle	2	1	27.3	8.0	18.9	5.6		4.3		6.5			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Middle	2	2	27.3	8.0	18.9	5.6		4.3		6.0			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Bottom	3	1	25.9	7.7	25.6	3.5	3.5	7.1		5.8			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	CS(Mf)3(N)	3:37	Bottom	3	2	25.9	7.7	25.6	3.5		7.1		5.3			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Surface	1	1	28.0	8.2	16.9	8.3	8.4	3.3	3.3	6.9	6.3		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Surface	1	2	28.0	8.2	16.9	8.4		3.4		6.5			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Middle	2	1											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Middle	2	2											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Bottom	3	1	26.9	8.0	22.1	6.4	6.4	3.2		6.4			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)16	4:23	Bottom	3	2	26.9	8.0	22.1	6.3		3.2		5.4			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Surface	1	1	28.4	8.3	16.8	8.4	8.4	3.8	6.6	6.4	6.9		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Surface	1	2	28.4	8.3	16.8	8.4		3.9		5.8			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Middle	2	1											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Middle	2	2											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Bottom	3	1	26.9	7.8	22.3	4.2	4.2	9.3		8.1			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4a	4:34	Bottom	3	2	26.9	7.8	22.3	4.1		9.3		7.1			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Surface	1	1	27.9	8.1	18.2	6.9	6.9	4.3	6.2	6.2	7.3		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Surface	1	2	27.9	8.1	18.2	6.9		4.4		7.2			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Middle	2	1											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Middle	2	2											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Bottom	3	1	27.1	7.7	21.7	3.9	3.9	8.1		8.3			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	SR4(N2)	4:39	Bottom	3	2	27.1	7.7	21.7	3.9		8.1		7.4			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Surface	1	1	28.0	8.3	16.7	8.3	8.3	3.0	3.4	5.4	6.2		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Surface	1	2	28.0	8.3	16.7	8.3		3.0		5.5			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Middle	2	1											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Middle	2	2											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Bottom	3	1	27.3	8.0	20.3	6.6	6.6	3.8		6.4			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS8(N)	4:45	Bottom	3	2	27.3	8.0	20.3	6.6		3.8		7.3			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Surface	1	1	28.3	8.3	15.8	8.5	8.5	2.7	3.1	4.7	4.7		
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Surface	1	2	28.3	8.3	15.8	8.5		2.7		3.6			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Middle	2	1											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Middle	2	2											
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Bottom	3	1	27.3	8.0	20.0	6.6	6.6	3.4		5.7			
TMCLKL	HY/2012/08	2019/07/29	Mid-flood	IS(Mf)9	4:52	Bottom	3	2	27.4	8.0	19.9	6.5		3.5		4.7			

Note: Indicates Exc 2017/11/01  
Indicates Exc 2017/11/01



**Key**

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

WQMS	X	Y
<b>Impact Station</b>		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
<b>Sensitive Receiver Station</b>		
SR4a	815247	818067
SR4(N2)	814688	817996

Locations of Water Quality Monitoring Stations