Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 5 September 2017 Date of Investigation Report: 6 October 2017

Notification No.: 20170901DO\_v1

Works Inspected: Data collected from water sampling works on 1 September 2017 and the results were issued on 4

September 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)
DO	IS5	Bottom	Surface and	Surface and	4.4	4.4
DO	IS10(N)	Bottom	Middle	Middle 4.2 (except 5 mg/L for FCZ) Bottom 3.6	4.5	4.5
DO	IS(Mf)11	Bottom	5.0		4.6	4.5
DO	IS17	Bottom	Bottom		4.5	5.2
DO	SR5(N)	Bottom	4.7		4.5	4.7

Notes:

AL means Action Level.

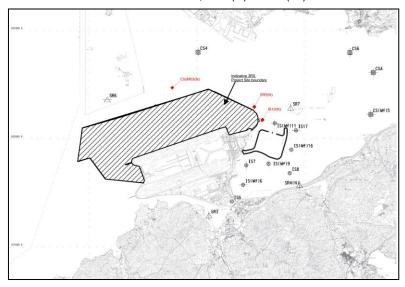
LL means Limit Level.

**Bold** means AL exceedances.

Bold with underline means LL exceedances.

## Possible reason for Action and Limit Level Non-compliance:

On 1 September 2017, five AL exceedances of DO recorded at IS5, IS10(N), IS(Mf)11, IS17 and SR5(N) were recorded during mid-ebb tide and three AL exceedances of DO recorded at IS5, IS10(N) and IS(Mf)11 were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 1 September 2017. No site runoff within the Contract site has been observed. Therefore, it is concluded that the exceedance was not related the Contract.

#### Actions taken/ to be taken:

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

Reviewed by : Keith Chau \_\_\_\_ Title : ET Leader

Date: 6 October 2017

Copied to: Contractor and Engineer Representative

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 11 September 2017 Date of Investigation Report: 9 October 2017

Notification No.: 20170906DO\_TURB\_v3

Works Inspected: Data collected from water sampling works on 6 September 2017 and the results were issued on 11

September 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)
	IS17	Bottom		Surface and	4.6	4.9
	SR6	Surface and Middle	Surface and	Middle	5.7	4.8
DO	SR10A	Surface and Middle	Middle	4.2 (except 5	<u>4.9</u>	<u>4.6</u>
	SKIUA	Bottom	5.0	mg/L for	4.8	4.5
		Surface and Middle	Bottom	FCZ)	<u>4.8</u>	<u>4.6</u>
	SR10B(N)	Bottom	4.7	Bottom 3.6	4.8	4.5
PARAM	STATION	DEPTH	AL (NTU)	LL (NTU)	MEASURED AT MID- EBB TIDE (NTU)	MEASURED AT MID- FLOOD TIDE (NTU)
TURB	IS(Mf)11	Depth Average	27.5 and 120% (i.e. 17.6 for mid- ebb/18.7 for mid-flood) of upstream control station's turbidity at the same tide of the same day	47.0 and 130% (i.e. 19.0 for mid- ebb/20.2 for mid-flood) of upstream control station's turbidity at the same tide of the same day	14.6	27.9

Notes:

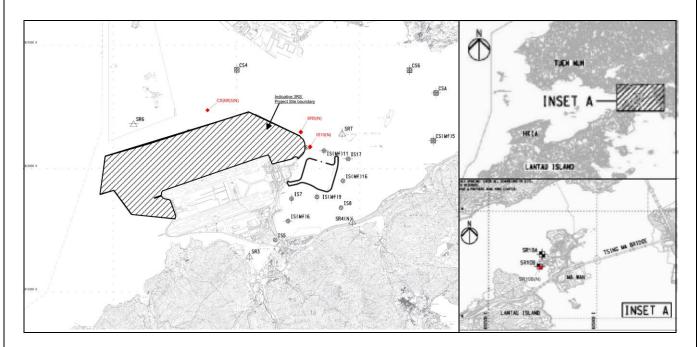
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 6 September 2017, one AL exceedance of DO recorded at IS17 was recorded during mid-ebb tide, three AL exceedances of DO recorded at SR6, SR10A, and SR10B(N) were recorded during mid-flood tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-ebb tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide and one AL exceedance of TURB recorded at IS(Mf)11 was recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 6 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 9 October 2017

Copied to : Contractor and Engineer Representative

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 19 September 2017 Date of Investigation Report: 25 September 2017

Notification No.: 20170906SS\_v1

Works Inspected: Data collected from water sampling works on 6 September 2017 and the results were issued on 15

September 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. 11.3 for mid-	34.4 and 130% (i.e. 12.3 for midebb/15.3 for midflood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	8.1	26.4
	SR4(N)	Depth Average	ebb/14.1 for mid- flood) of upstream control station's SS at the same tide of the same day		9.4	25.3
	SR6				6.2	23.6

Notes:

AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

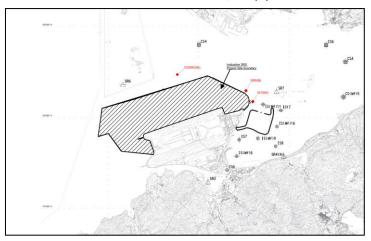
**Bold with underline** means LL exceedances.

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

#### Possible reason for Action and Limit Level Non-compliance:

On 6 September 2017, three AL exceedances of SS recorded at IS8, SR4(N) and SR6 were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 6 September 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 exceedances were 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.

Reviewed by : Keith Chau

Title: ET Leader

Date: 25 September 2017

Copied to : Contractor and Engineer Representative

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

Notifications of Environmental Quality Limits Exceedances Notification No.: 20170908DO\_TURB\_v3

Date of Notification: 13 September 2017 Date of Investigation Report: 9 October 2017

Works Inspected: Data collected from water sampling works on 8 September 2017 and the results were issued on 12

September 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)
	IS5	Surface and Middle			5.0	4.9
	107	Surface and Middle			4.8	5.1
	IS7	Bottom			4.6	5.2
	IS8	Surface and Middle			5.0	4.9
	IS(Mf)9	Surface and Middle			5.3	4.8
	IS10(N)	Surface and Middle			4.9	4.7
	10 (M) 4.4	Surface and Middle			5.0	4.7
DO	IS(Mf)11	Bottom		Surface and Middle 4.2 (except 5 mg/L for FCZ) Bottom	4.8	4.6
	IS(Mf)16	Surface and Middle	Surface and		4.6	4.9
		Bottom	Middle 5.0		4.3	5.0
	IS17	Surface and Middle	Bottom		4.9	4.7
	1517	Bottom	4.7		4.3	4.5
	SR3	Surface and Middle		3.6	4.7	4.9
	SR4(N)	Surface and Middle			5.2	4.9
	SR5(N)	Surface and Middle			5.0	4.8
	SR6	Surface and Middle			4.9	4.9
	SR7	Surface and Middle			5.1	4.9
	00404	Surface and Middle			<u>4.9</u>	<u>4.3</u>
	SR10A	Bottom			4.8	4.3
	SR10B(N)	Surface and Middle			<u>4.8</u>	<u>4.7</u>
PARAM	STATION	DEPTH	AL (NTU)	LL (NTU)	MEASURED AT MID- EBB TIDE (NTU)	MEASURED AT MID- FLOOD TIDE (NTU)
	IS5		27.5 and 120% (i.e. 20.2 for	47.0 and 130% (i.e. 21.9 for	34.4	6.6
TUDD	IS10(N)	Donth Average	mid- ebb/13.7 for mid-flood)	mid- ebb/14.9 for mid-flood)	25.2	31.6
TURB	IS(Mf)11	Depth Average	of upstream control station's turbidity at the same tide of the same day	of upstream control station's turbidity at the same tide of the same day	17.8	29.0
	SR6				12.2	35.3

Notes:

AL means Action Level.

LL means Limit Level.

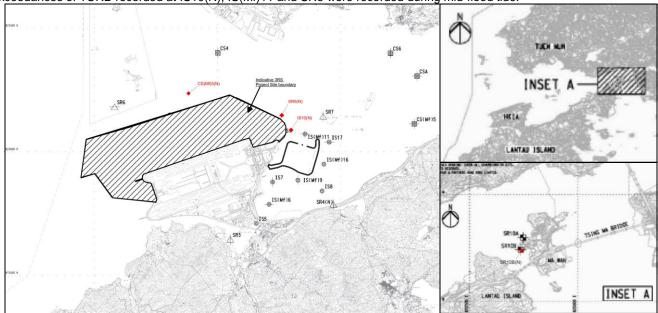
**Bold** means AL exceedances.

Bold with underline 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

# Possible reason for Action and Limit Level Non-compliance:

On 8 September 2017, nine AL exceedances of DO recorded at IS7, IS10(N), IS(Mf)16, IS17, SR3 and SR6 were recorded during mid-ebb tide, fifteen AL exceedances of DO recorded at IS5, IS8, IS(Mf)9, IS10(N), IS(Mf)11, IS(Mf)16, IS17, SR3, SR4(N), SR5(N), SR6, SR7 and SR10A were recorded during mid-flood tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-ebb tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide, one AL exceedance of TURB recorded at IS5 was recorded during mid-ebb tide and three AL exceedances of TURB recorded at IS10(N), IS(Mf)11 and SR6 were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 8 September 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 exceedances were 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.

Reviewed by	:	Keith Chau		Title :	ET Leader	
		Ke	ith	Date :	9 October 2017	

Copied to : Contractor and Engineer Representative

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 19 September 2017

Date of Investigation Report: 25 September 2017

Notification No.: 20170908SS

Works Inspected: Data collected from water sampling works on 8 September 2017 and the results were issued on 18

September 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	IS5		23.5 and 120% (i.e. 20.4 for mid-	34.4 and 130% (i.e. 22.1 for midebb/11.4 for midflood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	28.4	8.7
	IS10(N)	Depth Average	, , ,		19.5	<u>35.5</u>
	IS(Mf)11		tide of the same day		15.4	33.2

Notes:

AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

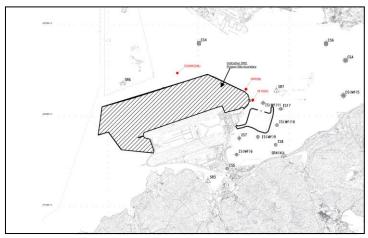
Bold with underline means LL exceedances.

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

## Possible reason for Action and Limit Level Non-compliance:

On 8 September 2017, one AL exceedance of SS recorded at IS5 was recorded during mid-ebb tide. One AL exceedance of SS recorded at IS(Mf)11 and one LL exceedance of SS at IS10(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 8 September 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 exceedances were 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.

Reviewed by : Keith Chau

Title: ET Leader

Date: 25 September 2017

Copied to : Contractor and Engineer Representative

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 15 September 2017 Date of Investigation Report: 6 October 2017

Notification No.: 20170911DO\_v1

Works Inspected: Data collected from water sampling works on 11 September 2017 and the results were issued on 14

September 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)
	ICO	Surface and Middle			5.2	4.8
	IS8	Bottom			5.0	4.6
	IS(Mf)9	Surface and Middle			5.3	4.8
	IS10(N)	Surface and Middle			4.9	4.6
	1310(14)	Bottom			4.8	4.4
	IS(Mf)11	Surface and Middle		Surface and Middle 4.2 (except 5 mg/L for	4.9	4.6
	13(1011)11	Bottom			4.6	4.5
	IS(Mf)16	Surface and Middle			5.2	4.7
	13(1011)10	Bottom	Conformation		4.3	4.6
	IS17	Surface and Middle	Surface and Middle		4.8	4.5
DO	1017	Bottom	5.0		4.2	4.2
	SR4(N)	Surface and Middle	Bottom 4.7	FCZ)	5.3	4.8
	SR5(N)	Surface and Middle	4.7	Bottom 3.6	4.7	4.6
	31(3(14)	Bottom		3.0	4.6	4.6
	SR6	Surface and Middle			4.7	4.7
	SNO	Bottom			4.7	4.6
	SR7	Surface and Middle			4.9	4.7
	SR10A	Surface and Middle			5.2	<u>4.5</u>
	SKIUA	Bottom			5.1	4.1
	SR10B(N)	Surface and Middle			<u>4.8</u>	<u>4.2</u>
	SK IUD(IV)	Bottom			4.6	4.0

Notes:

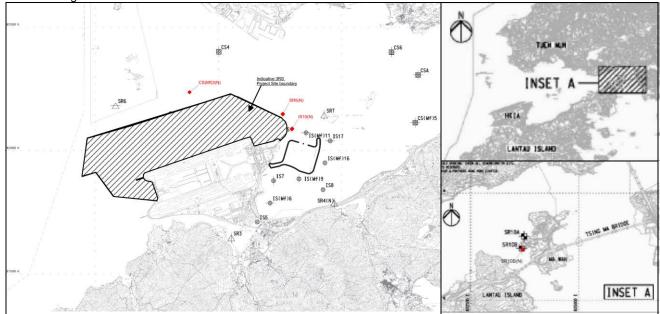
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 11 September 2017, eleven AL exceedances of DO recorded at IS10(N), IS(Mf)11, IS(Mf)16, IS17, SR5(N), SR6, SR7and SR10B(N) were recorded during mid-ebb tide, nineteen AL exceedances of DO recorded at IS8, IS(Mf)9, IS10(N), IS(Mf)11, IS(Mf)16, IS17, SR4(N), SR5(N), SR6, SR10A and SR10B(N) were recorded during mid-flood tide. One LL exceedance of DO recorded at SR10B(N) was recorded during mid-ebb tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 11 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date : 6 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 19 September 2017 Date of Investigation Report: 6 October 2017

Notification No.: 20170913DO\_v1

Works Inspected: Data collected from water sampling works on 13 September 2017 and the results were issued on 18

September 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)
	IS5	Bottom		Surface and Middle 4.2 (except 5 mg/L for	4.1	4.1
	IS(Mf)9	Bottom			6.5	4.2
	IS10(N)	Surface and Middle			4.7	5.0
	IS(Mf)11	Surface and Middle	Surface and		5.1	4.9
	IS(Mf)16	Bottom			4.1	4.2
DO	IS17	Surface and Middle	Middle 5.0		5.0	4.9
ВО	1017	Bottom	Bottom		3.8	4.1
	SR5(N)	Surface and Middle	4.7	FCZ) Bottom	4.8	5.5
	SR10A	Surface and Middle		3.6	<u>4.9</u>	<u>4.4</u>
	SKIUA	Bottom			5.2	3.9
	CD40D(NI)	Surface and Middle			5.2	<u>4.4</u>
	SR10B(N)	Bottom			5.4	4.1

Notes:

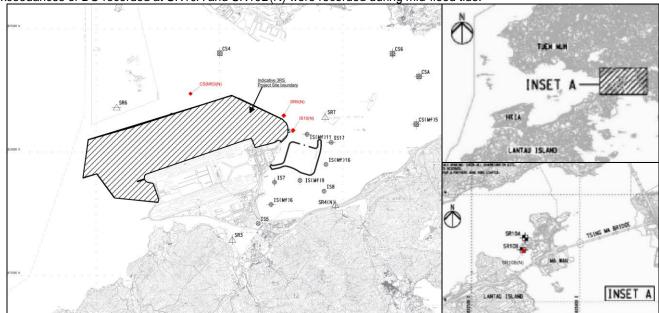
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

Bold with underline means LL exceedances.

On 13 September 2017, five AL exceedances of DO recorded at IS5, IS10(N), IS(Mf)16, IS17 and SR5(N) were recorded during mid-ebb tide, eight AL exceedances of DO recorded at IS5, IS(Mf)9, IS(Mf)11, IS(Mf)16, IS17, SR10A and SR10B(N) were recorded during mid-flood tide. One LL exceedance of DO recorded at SR10A was recorded during mid-ebb tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 13 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 6 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 21 September 2017 Date of Investigation Report: 12 October 2017

Notification No.: 20170915DO\_TURB\_v2

Works Inspected: Data collected from water sampling works on 15 September 2017 and the results were issued on 19

September 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)
	IS10(N)	Bottom			4.2	4.5
	IS(Mf)11	Surface and Middle			4.1	4.7
	IS17	Surface and Middle		Surface and	4.9	5.7
	1517	Bottom	Surface and	Middle 4.2	3.9	4.7
DO.	SR6	Surface and Middle	Middle 5.0	(except 5 mg/L for FCZ)  Bottom 3.6	5.5	4.8
DO	SKO	Bottom	Bottom		4.7	4.5
	SR10A	Surface and Middle	4.7		5.5	<u>4.7</u>
	SKIUA	Bottom			5.4	3.9
	SR10B(N)	Surface and Middle			5.4	<u>4.6</u>
	SK IUD(IV)	Bottom			5.0	4.3
TURB	IS8	Depth Average	27.5 and 120% (i.e. 19.6 for mid- ebb/15.4 for mid-flood) of upstream control station's turbidity at the same tide of the same day	47.0 and 130% (i.e. 21.2 for mid- ebb/16.7 for mid-flood) of upstream control station's turbidity at the same tide of the same day	10.6	<u>95.4*</u>

Notes:

AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

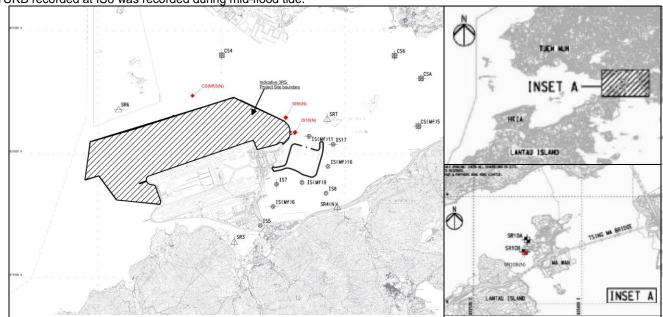
**Bold with underline** means LL exceedances.

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

\*The muddy water was observed due to 3 fast boats were moving around near the monitoring location during measurement period.

On 15 September 2017, four AL exceedances of DO recorded at IS10(N), IS(Mf)11 and IS17 were recorded during mid-ebb tide, six AL exceedances of DO recorded at IS10(N), IS(Mf)11, SR6, SR10A and SR10B(N) were recorded during mid-flood tide and two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide. One AL exceedance of TURB recorded at IS8 was recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 15 September 2017. No site runoff within the Contract site has been observed. The muddy water was observed due to 3 fast boats were moving around near the monitoring station IS8 during measurement period. No observation photos were taken during measurement period.

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

#### Actions taken/ to be taken:

As the exceedances were 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.

Reviewed by	:	Keith Chau	Title :	ET Leader
		Keith	Date :	12 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 27 September 2017 Date of Investigation Report: 27 September 2017

Notification No.: 20170918DO\_SS\_v1

Works Inspected: Data collected from water sampling works on 18 September 2017 and the results were issued on 27

September 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)
	IS5	Bottom		_	4.5	5.8
	IS10(N)	Bottom			4.6	5.0
DO	IS(Mf)11	Bottom	Surface and	Surface and	4.6	5.0
	IS(Mf)16	Bottom		Middle	4.4	5.0
	SR6	Surface and Middle	Middle 5.0	4.2 (except 5 mg/L for FCZ) Bottom 3.6	4.7	4.4
		Bottom	Bottom 4.7		4.5	4.3
	SR10A	Surface and Middle			5.5	<u>4.7</u>
	SR10B(N)	Surface and Middle			5.4	<u>4.9</u>
SS	IS8	Depth Average	23.5 and 120% (i.e. 9.9 for midebb/13.4 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 10.8 for mid-ebb/14.5 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	6.3	25.0

Notes:

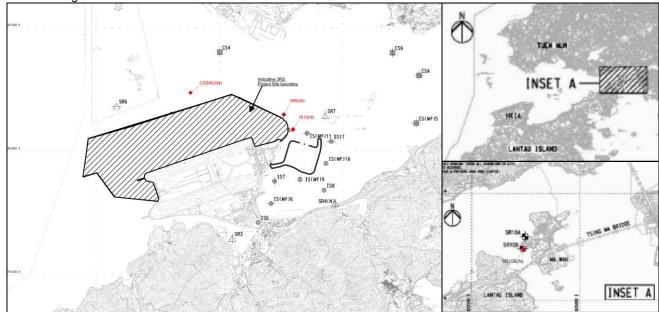
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 18 September 2017, six AL exceedances of DO recorded at IS5, IS10(N), IS(Mf)11, IS(Mf)16 and SR6 were recorded during mid-ebb tide, two AL exceedances of DO recorded at SR6 were recorded during mid-flood tide, two LL exceedances of DO recorded at SR10A and SR10B(N) were recorded during mid-flood tide and one AL exceedance of SS recorded at IS8 was recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 18 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 27 September 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 25 September 2017 Date of Investigation Report: 11 October 2017

Notification No.: 20170920DO\_SS\_v1

Works Inspected: Data collected from water sampling works on 20 September 2017 and the results were issued on 29

September 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)
	CDe	Surface and Middle		Surface and Middle	5.1	4.5
	SR6	Bottom	Surface and Middle	4.2	5.0	4.6
DO	SR10A	Surface and Middle	5.0	(except 5 mg/L for	5.0	<u>4.5</u>
	SKIDA	Bottom	Bottom 4.7	FCZ)	4.7	4.5
	SR10B(N)	Surface and Middle		Bottom 3.6	5.0	<u>4.5</u>
SS	SR6	Depth Average	23.5 and 120% (i.e. 16.7 for mid- ebb/19.0 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 18.1 for mid- ebb/20.6 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	10.4	25.4

Notes:

AL means Action Level.

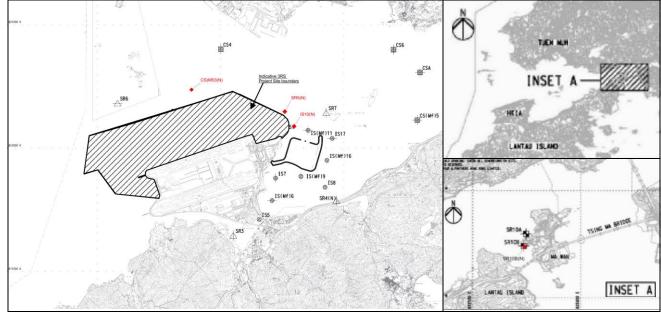
LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 20 September 2017, three AL exceedances of DO at SR6 and SR10A were recorded during mid-flood tide, two LL exceedances of DO at SR10A and SR10B(N) were recorded during mid-flood tide and one AL exceedance of SS at SR6 was

recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 20 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date : 11 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 27 September 2017 Date of Investigation Report: 11 October 2017

Works Inspected: Data collected from water sampling works on 22 September 2017 and the results were issued on 26

Notification No.: 20170922DO\_v1

September 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)
DO	IS8	Surface and Middle	Surface and Middle 5.0 Bottom 4.7	Surface and Middle 4.2 (except 5 mg/L for FCZ) Bottom 3.6	5.2	4.8
	IS(Mf)9	Surface and Middle			5.3	4.9
	IS10(N)	Surface and Middle			4.8	4.8
		Bottom			4.6	4.8
	IS(Mf)11	Surface and Middle			4.7	4.9
	IS(Mf)16	Surface and Middle			5.1	4.8
	IS17	Surface and Middle			5.0	4.8
	SR3	Surface and Middle			4.9	5.0
	SR4(N)	Surface and Middle			5.2	4.8
	SR5(N)	Surface and Middle			4.9	4.8
	SR6	Surface and Middle			4.8	4.8
	SR7	Surface and Middle			5.0	4.8
	SR10A	Surface and Middle			4.9	4.7
	SR10B(N)	Surface and Middle			4.8	4.6
		Bottom			4.9	4.5

Notes:

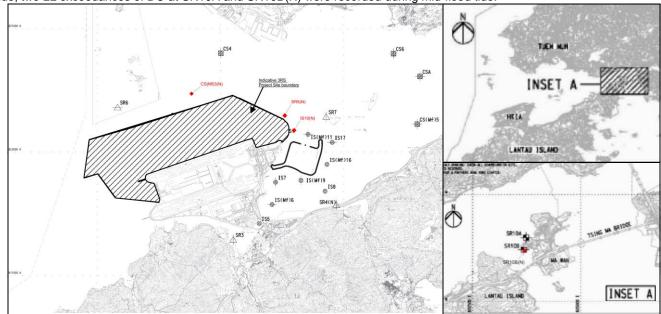
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 22 September 2017, six AL exceedances of DO at IS10(N), IS(Mf)11, SR3, SR5(N) and SR6 were recorded during mid-ebb tide, two LL exceedances of DO at SR10A and SR10B(N) were recorded during mid-ebb tide. Eleven AL exceedances of DO at IS8, IS(Mf)9, IS10(N), IS(Mf)11, IS(Mf)16, IS17, SR4(N), SR5(N), SR6, SR7 and SR10B(N) were recorded during mid-flood tide, two LL exceedances of DO at SR10A and SR10B(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 22 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 11 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 3 October 2017 Date of Investigation Report: 11 October 2017

Notification No.: 20170925DO\_SS\_v1

Works Inspected: Data collected from water sampling works on 25 September 2017 and the results were issued on 6 October

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)
DO	SR10B(N)	Surface and Middle	Surface and Middle 5.0 Bottom 4.7	Surface and Middle 4.2 (except 5 mg/L for FCZ) Bottom 3.6	5.1	<u>4.7</u>
		Bottom			5.0	4.6
SS	IS8	Depth Average	23.5 and 120% (i.e. 7.3 for mid- ebb/9.1 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 7.9 for mid- ebb/9.8 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	11.3	30.4

Notes:

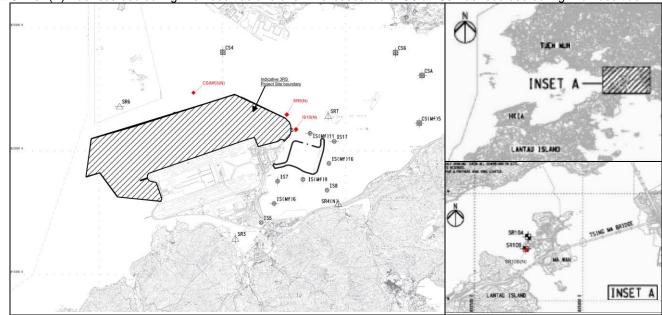
AL means Action Level.

LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 25 September 2017, one AL exceedance of DO at SR10B(N) was recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) was recorded during mid-flood tide and one AL exceedance of SS at IS8 was recorded during mid-flood tide..



As confirmed by the Contractor, there were no marine transportation and marine-based work on 25 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date : 11 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 4 October 2017 Date of Investigation Report: 10 October 2017

Notification No.: 20170927DO\_v1

Works Inspected: Data collected from water sampling works on 27 September 2017 and the results were issued on 3 October

2017

Monitoring Location: Water Quality Monitoring Station

# 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)		
DO	IS10(N)	Bottom	Surface and Middle 5.0 Bottom 4.7	Surface and	4.6	5.0		
DO	IS17	Bottom		Middle 5.0 Bottom	Middle 4.2	4.6	4.8	
DO	SR5(N)	Bottom				(except 5	4.6	5.0
DO	SR10A	Bottom			mg/L for	5.3	4.6	
DO	SR10B(N)	Surface and Middle			FCZ) Bottom	5.0	<u>4.7</u>	
		Bottom		3.6	4.4	4.4		

Notes:

AL means Action Level.

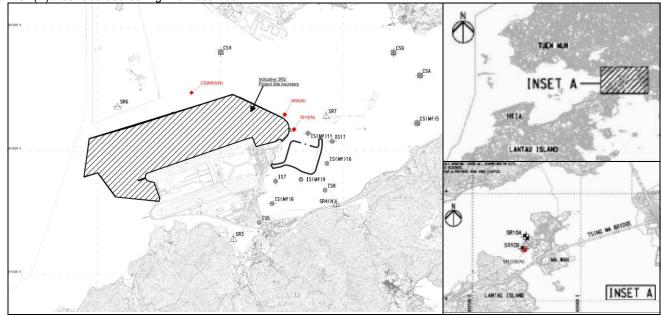
LL means Limit Level.

**Bold** means AL exceedances.

**Bold with underline** means LL exceedances.

On 27 September 2017, four AL exceedances of DO at IS10(N), IS17, SR5(N) and SR10B(N) were recorded during mid-ebb tide. Two AL exceedance of DO at SR10A and SR10B(N) were recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are recorded during mid-flood tide, one LL exceedance of DO at SR10B(N) are re

SR10B(N) was recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 27 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 10 October 2017

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Boundary Crossing Facilities - Passenger Clearance Building

**Notifications of Environmental Quality Limits Exceedances** 

Date of Notification: 9 October 2017 Date of Investigation Report: 17 October 2017

Notification No.: 20170929DO\_v3

Works Inspected: Data collected from water sampling works on 29 September 2017 and the results were issued on 6 October

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)
DO	IS5	Bottom	Surface and Middle 5.0 Bottom 4.7	1.9	4.8	4.4
	IS7	Bottom			4.3	15.0*
	IS8	Bottom			4.4	5.7
	IS10(N)	Surface and Middle			4.8	6.2
		Bottom		(except 5	4.2	4.2
	IS(Mf)11	Bottom		mg/L for FCZ) Bottom 3.6	4.6	4.1
	IS(Mf)16	Bottom			4.4	5.5
	IS17	Bottom			4.7	4.2
	SR5(N)	Bottom			4.3	4.2
	SR10B(N)	Bottom			4.5	5.0

Notes:

AL means Action Level.

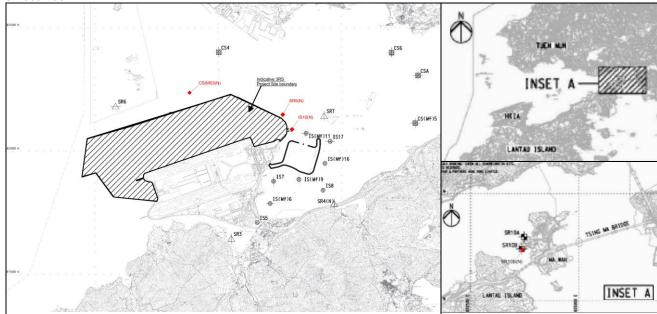
LL means Limit Level.

**Bold** means AL exceedances.

Bold with underline means LL exceedances.

\* Red tide was observed by water sampling team near WQM stations SR3, IS5, IS(Mf)6, IS7 and IS(Mf)6 during mid-flood tide on 29 September 2017.

On 29 September 2017, eight AL exceedances of DO at IS7, IS8, IS10(N), IS(Mf)11, IS(Mf)16, SR5(N) and SR10B(N) were recorded during mid-ebb tide. Five AL exceedance of DO at IS5, IS10(N), IS(Mf)11, IS17 and SR5(N) were recorded during mid-flood tide.



As confirmed by the Contractor, there were no marine transportation and marine-based work on 29 September 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 exceedances were 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.

Reviewed by : Keith Chau Title : ET Leader

Date: 17 October 2017