

Contract No. HY/2011/03 -

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities

Notifications of Environmental Quality Limits Exceedances

Notification No.: 280 ver1

Date of Notification: 15 August 2018

Works Inspected: Data collected from water sampling works on 6 August 2018 and the results were issued on 15 August 2018

Monitoring Location: Water Quality Monitoring Stations

Parameter: Dissolved Oxygen (DO)/ ~~Suspended Solids (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	IS10(N)	Surface and Middle	5.0	4.2	4.6	See note 3.
DO	SR5(N)	Surface and Middle	5.0	4.2	4.7	See note 3.
DO	IS10(N)	Bottom	4.7	3.6	4.3	See note 3.
DO	SR5(N)	Bottom	4.7	3.6	4.3	See note 3.

Notes:

1. ***Bold Italic*** means AL exceedances.
2. ***Bold Italic with underline*** means LL exceedances.
3. Thunderstorm Warning was issued by the Hong Kong Observatory on 6 August 2018. The water quality monitoring for flood tide on 6 August 2018 was cancelled at these stations due to safety reason.

Possible reasons for Action Level Non-compliance:

On 6 August 2018, Action Level exceedances of dissolved oxygen were recorded at stations IS10(N) and SR5(N) during mid-ebb tide. The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

1. Seawall construction at Zones 2 and 3 were carried out on 6 August 2018. As confirmed by the Contractor, seawall construction at Zones 2 and 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report. According to Contractor's information, there was no marine transportation near IS10(N) and SR5(N) during sampling period and no marine works were conducted near stations IS10(N) and SR5(N) which are located outside the site boundary of HKLR03 Contract. No abnormality or malpractice for the contract works was observed during the sampling exercise.
2. The range of dissolved oxygen for surface and middle level, bottom level at stations IS10 and SR5 during the baseline monitoring is shown as below:

Stations	Depth	Range of Dissolved Oxygen (mg/L) Mid-Ebb Tide		Range of Dissolved Oxygen (mg/L) Mid-Flood Tide	
IS10	Surface and Middle	5.0	to 7.2	5.0	to 7.6
SR5	Surface and Middle	5.1	to 7.3	4.8	to 7.4
IS10	Bottom	4.6	to 7.0	4.9	to 7.0
SR5	Bottom	4.8	to 7.0	4.8	to 7.1

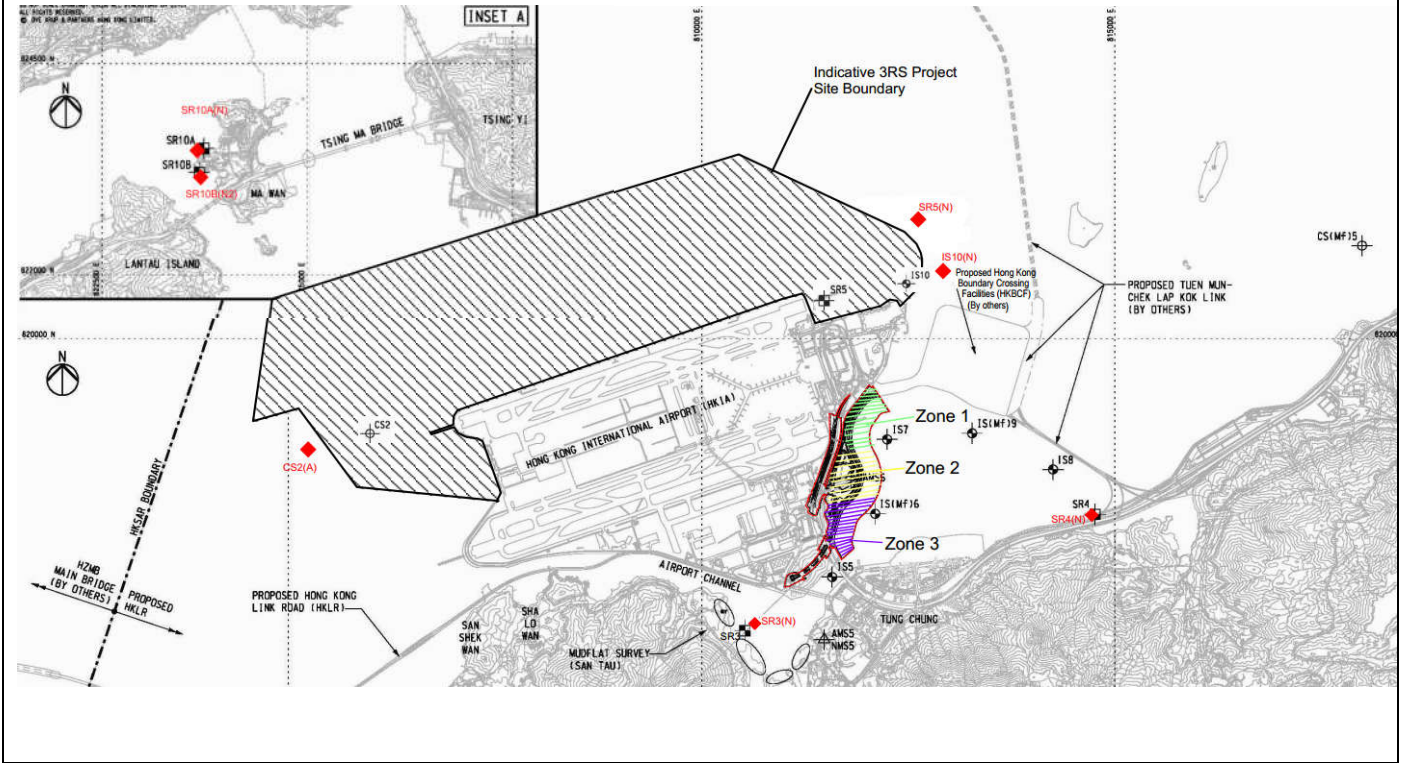
On 6 August 2018, the measured value of dissolved oxygen for surface and middle level, bottom level at stations IS10(N) and SR5(N) during the mid-ebb tide was below the range of the baseline monitoring.

3. However, there were no specific activities recorded during the monitoring period that would cause any significant impact on the monitoring results. As such, the exceedances in DO level are considered to be attributed to other external factors rather than the contract works.

Actions taken/ to be taken:


As the DO level recorded beyond the water quality criteria was not related to contract works, no immediate actions are considered necessary. However, the Contractor is reminded to ensure the silt curtain is fully maintained throughout the construction works and construction works are under stringer supervision to prevent any water quality impacts to the seawater.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 7 September 2018

Copied to : Supervising Officer, IEC, EPD, Contractor, ENPO

**Contract No. HY/2011/03 -
Hong Kong- Zhuhai- Macao Bridge
Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities
Notifications of Environmental Quality Limits Exceedances**

Notification No.: 281s ver1

Date of Notification: 15 August 2018

Works Inspected: Data collected from water sampling works on 8 August 2018 and the test report was issued on 15 August 2018.

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	DA	<p>23.5 and 120% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2(A): 6.27 x 120% = 7.5 for mid ebb; CS(Mf)5: 10.52 x 120% = 12.6 for mid flood)</p>	<p>34.4 and 130% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2(A): 6.27 x 130% = 8.1 for mid ebb; CS(Mf)5: 10.52 x 130% = 13.7 for mid flood)</p>	3.0	26.8

Notes:

- 1) DA means depth average.
- 2) ***Bold Italic*** means AL exceedances.
- 3) ***Bold Italic with underline*** means LL exceedances.

Possible reasons for Action Level Non-compliance:

On 8 August 2018, an Action Level exceedance of suspended solid was recorded at station IS8 during mid-flood tide. The exceedance has been investigated and is considered unlikely to be related to the contract works due to the following reasons:

1. Seawall construction at Zones 2 and 3 were carried out on 8 August 2018. As confirmed by the Contractor, seawall construction at Zones 2 and 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station IS8 during the baseline monitoring are shown as below:

Station	Range of Suspended Solid (mg/L) Mid-Ebb Tide		Range of Suspended Solid (mg/L) Mid-Flood Tide	
IS8	5.5	to	25.5	5.8 to 31.3

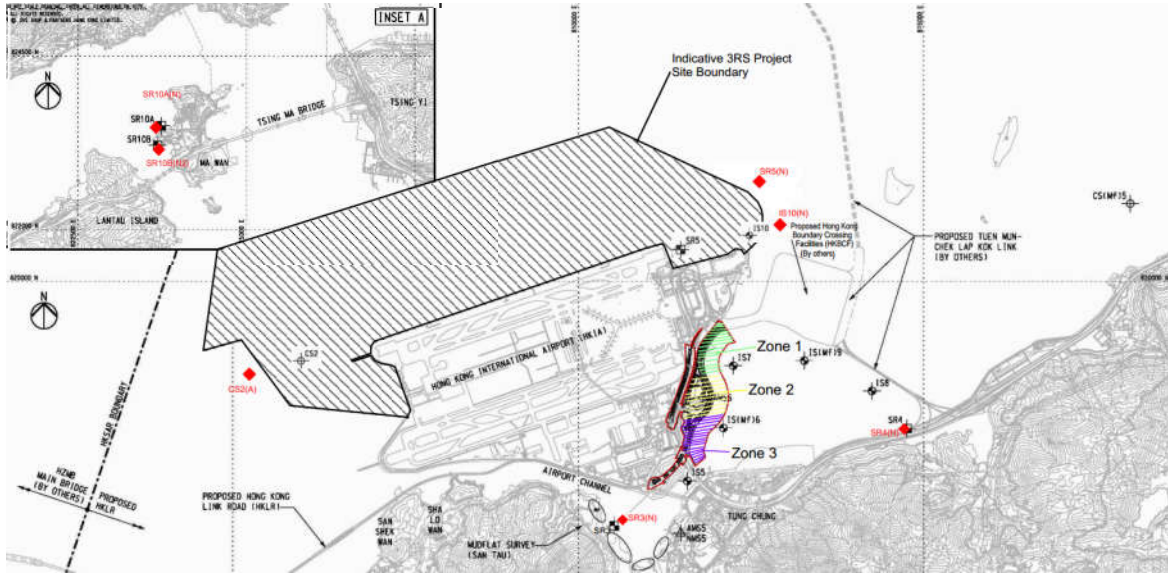
The measured value for mid-flood tide at station IS8 was within the range of suspended solid for mid-flood tide during baseline monitoring.

3. During sampling exercise, water appearance was observed moderate (water appearance was observed neither clear nor turbid) at station IS8. There was no marine transportation near station IS8 during sampling period and no marine works were conducted near station IS8 which is located outside the site boundary of HKLR03 Contract. No abnormality or malpractice for the contract works was observed during the sampling exercise.
4. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. As such, the exceedance of suspended solid level is considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria was not related to the contract works, no immediate actions are considered necessary. However, the Contractor is reminded to ensure that the silt curtain is fully maintained throughout the construction works and construction works are carried out under stringent supervision to prevent any water quality impacts to the seawater.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 7 September 2018

Copied to : Supervising Officer, IEC, EPD, Contractor, ENPO

**Contract No. HY/2011/03 -
Hong Kong- Zhuhai- Macao Bridge
Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities
Notifications of Environmental Quality Limits Exceedances**

Notification No.: 282s ver 0

Date of Notification: 16 August 2018

Works Inspected: Data collected from water sampling works on 10 August 2018 and the test report was issued on 16 August 2018.

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	DA	23.5 and 120% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2(A): 11.35 x 120% = 13.6 for mid ebb; CS(Mf)5: (See Note 4)	34.4 and 130% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2(A): 11.35 x 130% = 14.8 for mid ebb; CS(Mf)5: (See Note 4)	25.8	See Note 4.

Notes:

- 1) DA means depth average.
- 2) ***Bold Italic*** means AL exceedances.
- 3) ***Bold Italic with underline*** means LL exceedances.
- 4) Due to Thunderstorm Warning issued by the Hong Kong Observatory, the water quality monitoring for flood tide on 10 August 2018 was cancelled at these stations.

Possible reasons for Action Level Non-compliance:

On 10 August 2018, an Action Level exceedance of suspended solid was recorded at station IS8 during mid-ebb tide. The exceedance has been investigated and is considered unlikely to be related to the contract works due to the following reasons:

1. Seawall construction at Zones 2 and 3 were carried out on 10 August 2018. As confirmed by the Contractor, seawall construction at Zones 2 and 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station IS8 during the baseline monitoring are shown as below:

Station	Range of Suspended Solid (mg/L) Mid-Ebb Tide		Range of Suspended Solid (mg/L) Mid-Flood Tide	
IS8	5.5	to 25.5	5.8	to 31.3

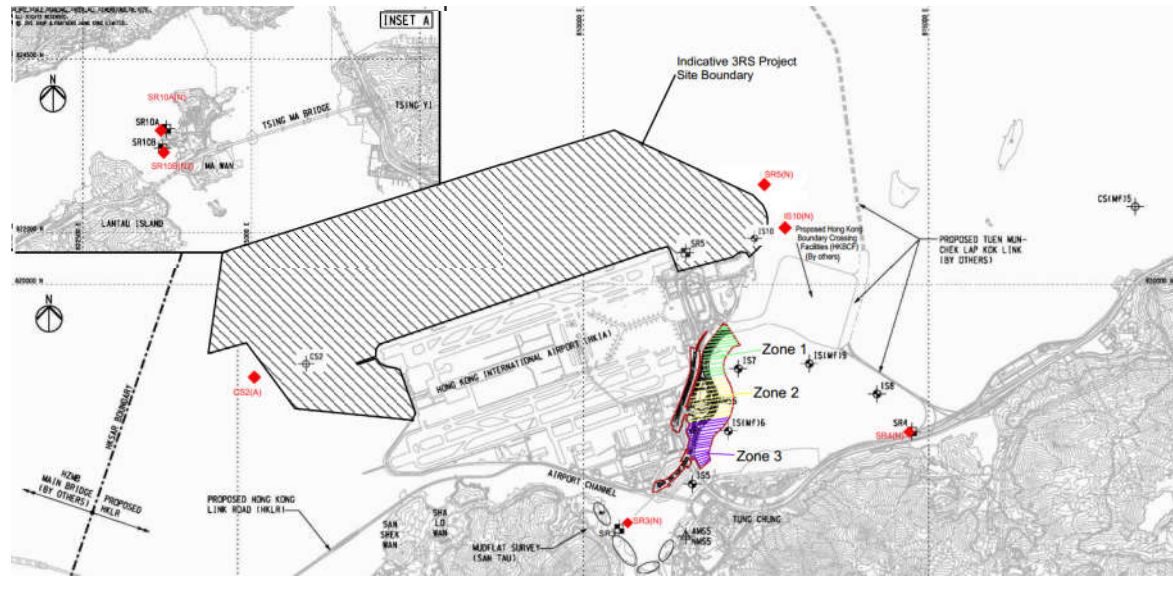
The measured value for mid-flood tide at station IS8 was slightly above the range of suspended solid for mid-ebb tide during baseline monitoring.

3. However, water appearance was observed clear at station IS8 during sampling exercise. There was no marine transportation near station IS8 during sampling period and no marine works were conducted near station IS8 which is located outside the site boundary of HKLR03 Contract. No abnormality or malpractice for the contract works was observed during the sampling exercise.
4. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. As such, the exceedance of suspended solid level is considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria was not related to the contract works, no immediate actions are considered necessary. However, the Contractor is reminded to ensure that the silt curtain is fully maintained throughout the construction works and construction works are carried out under stringent supervision to prevent any water quality impacts to the seawater.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 4 September 2018

Copied to : Supervising Officer, IEC, EPD, Contractor, ENPO

Contract No. HY/2011/03 -

Hong Kong- Zhuhai- Macao Bridge

Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities

Notifications of Environmental Quality Limits Exceedances

Notification No.: 283 ver0

Date of Notification: 24 August 2018

Works Inspected: Data collected from water sampling works on 13 August 2018 and the results were issued on 24 August 2018

Monitoring Location: Water Quality Monitoring Stations

Parameter: Dissolved Oxygen (DO)/ ~~Suspended Solids (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	IS10(N)	Surface and Middle	5.0	4.2	4.8	4.9
DO	SR5(N)	Surface and Middle	5.0	4.2	4.8	4.8
DO	SR10A(N)	Surface and Middle	5.0	5.0	<u>4.7</u>	<u>4.8</u>
DO	SR10B(N2)	Surface and Middle	5.0	5.0	<u>4.7</u>	<u>4.9</u>
DO	SR10A(N)	Bottom	4.7	3.6	4.6	4.7
DO	SR10B(N2)	Bottom	4.7	3.6	4.6	4.8

Notes:

- 1) ***Bold Italic*** means AL exceedances.
- 2) ***Bold Italic with underline*** means LL exceedances.

Possible reasons for Action Level / Limit Level Non-compliance:

On 13 August 2018, Action Level exceedances of dissolved oxygen were recorded at stations IS10(N), SR5(N), SR10A(N) and SR10B(N2) during the mid-ebb tide; Action Level exceedances of dissolved oxygen were recorded at stations IS10(N) and SR5(N) during mid-flood tide; Limit Level exceedances of dissolved oxygen were recorded at stations SR10A(N) and SR10B(N2) during mid-ebb tide and mid-flood tide. The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

1. Seawall construction at Zones 2 and 3 were carried out on 13 August 2018. As confirmed by the Contractor, seawall construction at Zones 2 and 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report. According to Contractor's information, there was no marine transportation near stations IS10(N), SR5(N), SR10A(N) and SR10B(N2) during sampling period and no marine works were conducted near IS10(N), SR5(N), SR10A(N) and SR10B(N2) which are located outside the site boundary of HKLR03 Contract. No abnormality or malpractice for the contract works was observed during the sampling exercise.
2. The range of dissolved oxygen at stations IS10, SR5, SR10A and SR10B during the baseline monitoring is shown as below:

Stations	Depth	Range of Dissolved Oxygen (mg/L) Mid-Ebb Tide		Range of Dissolved Oxygen (mg/L) Mid-Flood Tide	
IS10	Surface and Middle	5.0	to 7.2	5.0	to 7.6
SR5	Surface and Middle	5.1	to 7.3	4.8	to 7.4
SR10A	Surface and Middle	4.8	to 8.3	5.3	to 7.5
SR10B	Surface and Middle	5.2	to 9.0	5.0	to 8.4

SR10A	Bottom	4.8	to	7.5	5.1	to	7.8
SR10B	Bottom	5.6	to	9.3	4.9	to	7.6

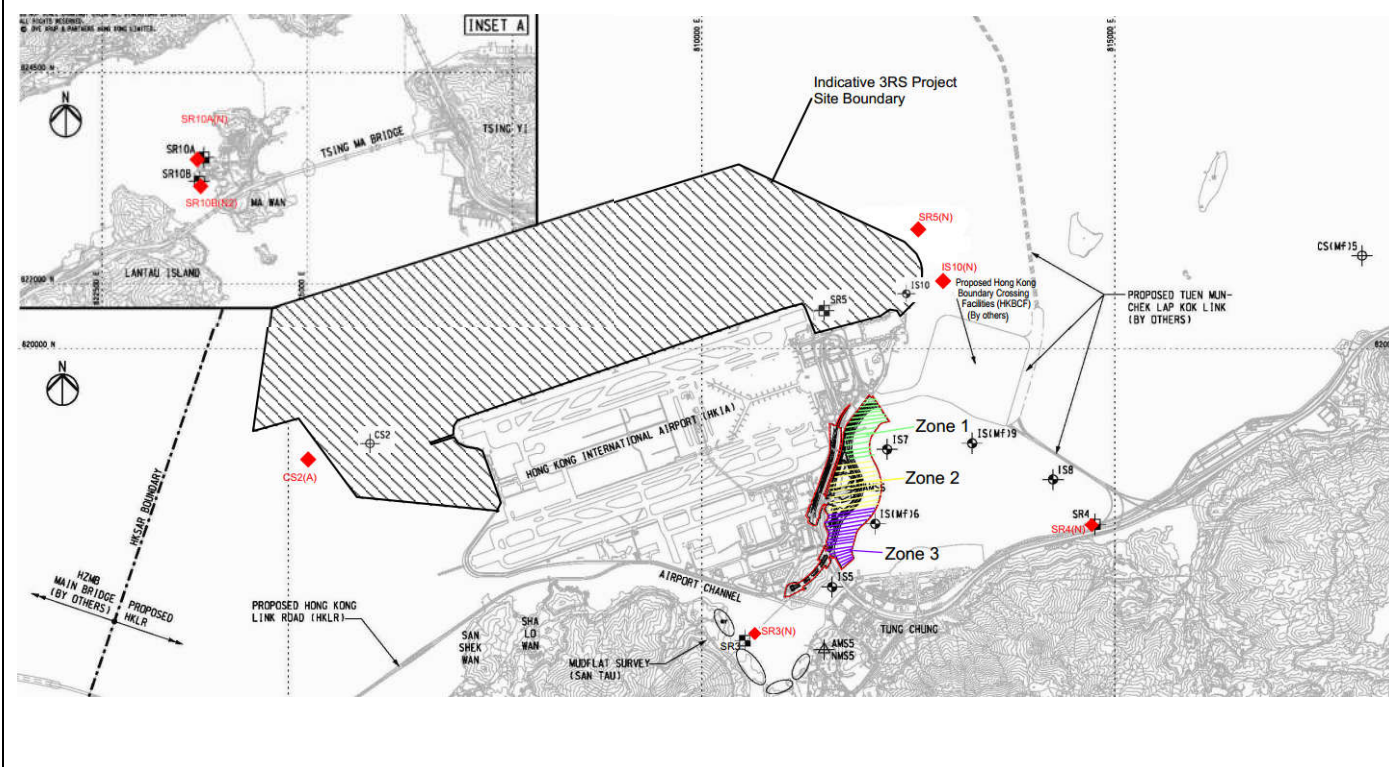
On 13 August 2018, the measured value of dissolved oxygen for surface and middle level at station SR5(N) during the mid-flood tide was within the range of the baseline monitoring. The measured value of dissolved oxygen for surface and middle level at stations IS10(N), SR10A(N) and SR10B(N2) during mid-ebb and mid-flood tide; for surface and middle level at station SR5(N) during mid-ebb tide; for bottom level at stations SR10A(N) and SR10B(N2) during the mid-ebb tide were below the range of the baseline monitoring.

3. However, there were no specific activities recorded during the monitoring period that would cause any significant impact on the monitoring results. As such, the exceedances in DO level are considered to be attributed to other external factors rather than the contract works.

Actions taken/ to be taken:

As the DO level recorded beyond the water quality criteria was not related to contract works, no immediate actions are considered necessary. However, the Contractor is reminded to ensure the silt curtain is fully maintained throughout the construction works and construction works are under stringer supervision to prevent any water quality impacts to the seawater.

Location Plan:



Reviewed by : Claudine Lee Title : ET Leader

Date : 4 September 2018

Copied to : Supervising Officer, IEC, EPD, Contractor, ENPO

Date of Notification: 24 August 2018

Works Inspected: Data collected from water sampling works on 15 August 2018 and the results were issued on 24 August 2018

Monitoring Location: Water Quality Monitoring Stations

Parameter: Dissolved Oxygen (DO)/ ~~Suspended Solids (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	IS10(N)	Surface and Middle	5.0	4.2	5.2	4.9
DO	SR5(N)	Surface and Middle	5.0	4.2	5.2	4.9
DO	SR10A(N)	Surface and Middle	5.0	5.0	<u>4.9</u>	5.0

Notes:
 1) ***Bold Italic*** means AL exceedances.
 2) ***Bold Italic with underline*** means LL exceedances.

Possible reasons for Action Level / Limit Level Non-compliance:

On 15 August 2018, Action Level exceedances of dissolved oxygen were recorded at stations IS10(N) and SR5(N) during mid-flood tide. A Limit Level exceedance of dissolved oxygen was recorded at SR10A(N). The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

- Seawall construction at Zones 2 and 3 were carried out on 15 August 2018. As confirmed by the Contractor, seawall construction at Zones 2 and 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report. According to Contractor's information, there was no marine transportation near stations IS10(N), SR5(N) and SR10A(N) during sampling period and no marine works were conducted near stations IS10(N), SR5(N) and SR10A(N) which are located outside the site boundary of HKLR03 Contract. No abnormality or malpractice for the contract works was observed during the sampling exercise.
- The range of dissolved oxygen at stations IS10 and SR5 during the baseline monitoring is shown as below:

Stations	Depth	Range of Dissolved Oxygen (mg/L) Mid-Ebb Tide		Range of Dissolved Oxygen (mg/L) Mid-Flood Tide	
IS10	Surface and Middle	5.0	to 7.2	5.0	to 7.6
SR5	Surface and Middle	5.1	to 7.3	4.8	to 7.4
SR10A	Surface and Middle	4.8	to 8.3	5.3	to 7.5

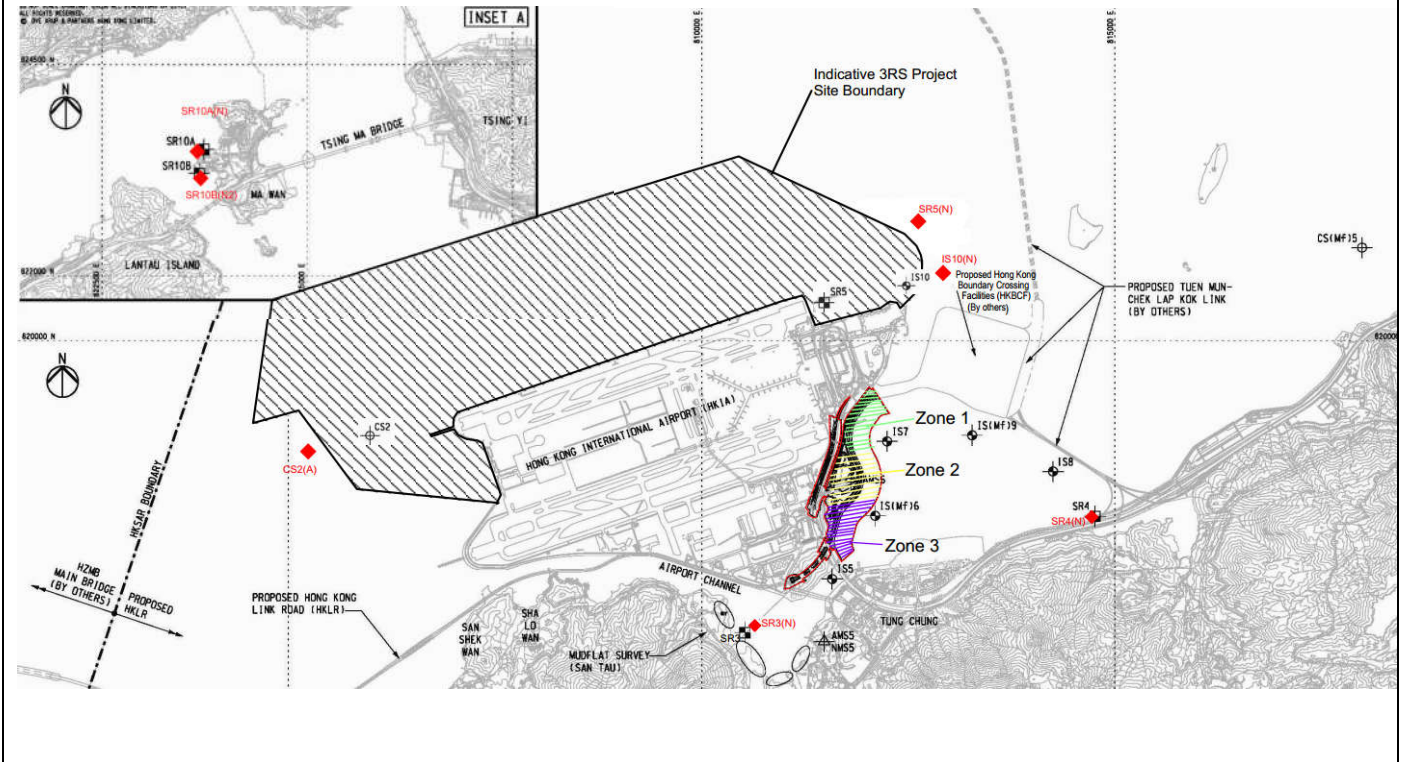
On 15 August 2018, the measured value of dissolved oxygen for surface and middle level at station SR5(N) during mid-flood tide and at station SR10A(N) during mid-ebb tide were within the range of the baseline monitoring. The measured value of dissolved oxygen for surface and middle level at station IS10(N) during the mid-flood tide was below the range of the baseline monitoring.

- However, there were no specific activities recorded during the monitoring period that would cause any significant impact on the monitoring results. As such, the exceedances in DO level are considered to be attributed to other external factors rather than the contract works.

Actions taken/ to be taken:

As the DO level recorded beyond the water quality criteria was not related to contract works, no immediate actions are considered necessary. However, the Contractor is reminded to ensure the silt curtain is fully maintained throughout the construction works and construction works are under stringer supervision to prevent any water quality impacts to the seawater.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 4 September 2018

Copied to : Supervising Officer, IEC, EPD, Contractor, ENPO

Summary of Notifications of Summons and Prosecutions

Total No. of Notifications of Summons / Prosecutions Received	No. of Notifications of Summons / Prosecutions Received during Reporting Period	Status of Notifications of Summons / Prosecutions
0	0	N/A