

**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.: 174 ver1

Date of Notification: 4 April 2014

Works Inspected: Data collected from water sampling works on 17 March 2014 and the test report was issued on 24 March 2014.

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)
SS	IS5	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 10.77 x 120% = 12.9 mg/L for mid ebb) AND CS(Mf)5: 9.53 x 120% = 11.4 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 10.77 x 130% = 14.0 mg/L for mid ebb) AND CS(Mf)5: 9.53 x 130% = 12.4 mg/L for mid flood)	24.3	10.2
SS	IS10	DA			14.0	24.4
SS	SR3	DA			29.2	11.9

Notes:
DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 17 March 2014, AL exceedances were recorded at stations IS5 and SR3 during mid-ebb tide and at station IS10 during mid-flood tide.

The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

- Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at stations IS5, IS10 and SR3 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
IS5	8.1 to 25.7	7 to 23.7
IS10	6.1 to 20.2	7.2 to 16
SR3	6.7 to 31	7.6 to 28

The measured values at stations IS5 and SR3 were within the range of suspended solid during baseline monitoring for mid-ebb tide. The measured value at station IS10 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

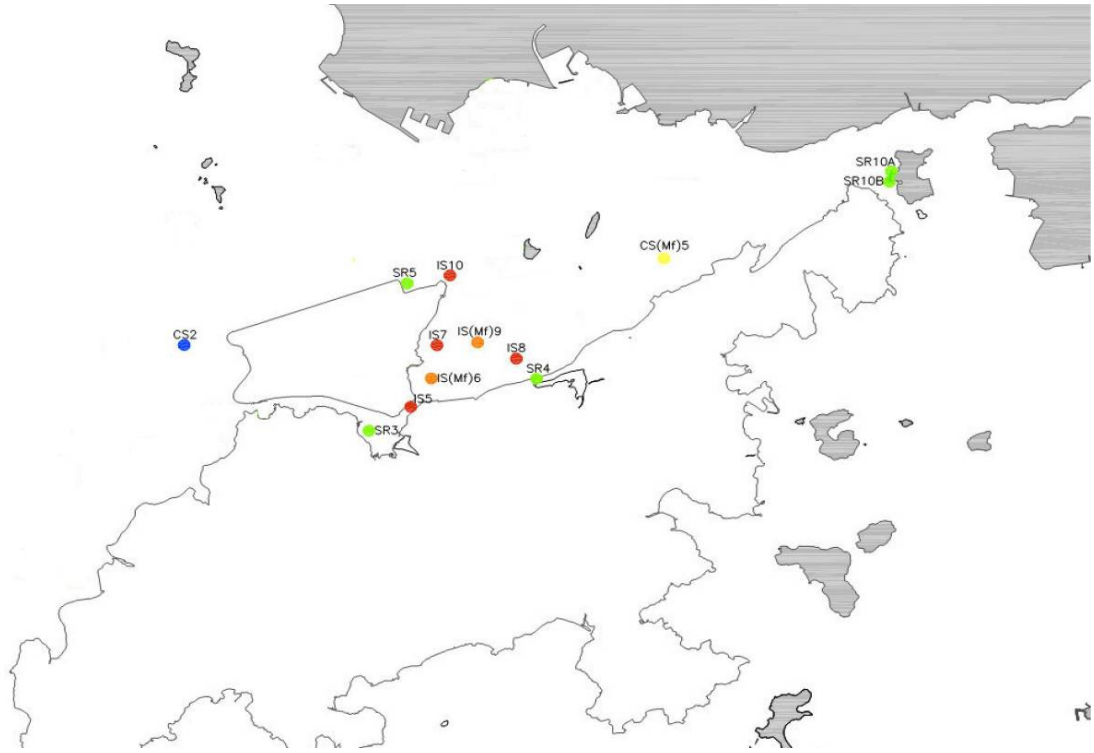
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 4 April 2014

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.: 175 ver1

Date of Notification: 4 April 2014

Works Inspected: Data collected from water sampling works on 19 March 2014 and the test report was issued on 26 March 2014.

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)
SS	IS5	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 12.67 x 120% = 15.2 mg/L for mid ebb) AND CS(Mf)5: 8.43 x 120% = 10.1 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 12.67 x 130% = 16.5 mg/L for mid ebb) AND CS(Mf)5: 8.43 x 130% = 11.0 mg/L for mid flood)	30.9	11.2
SS	IS(Mf)6	DA			27.6	15.0
SS	IS10	DA			13.1	25.1
SS	SR3	DA			36.7	11.3
SS	SR5	DA			8.5	27.0

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 19 March 2014, AL exceedances were recorded at stations IS5 and IS(Mf)6 during mid-ebb tide and at stations IS10 and SR5 during mid-flood tide. A LL exceedance was recorded at station SR3 during mid-ebb tide.

The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

- Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at stations IS5, IS(Mf)6, IS10, SR3 and SR5 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
IS5	8.1 to 25.7	7 to 23.7
IS(Mf)6	7.1 to 19	8.5 to 35
IS10	6.1 to 20.2	7.2 to 16
SR3	6.7 to 31	7.6 to 28

Date of Notification: 4 April 2014

Works Inspected: Data collected from water sampling works on 21 March 2014 and the test report was issued on 27 March 2014.

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)
SS	SR5	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 13.68 x 120% = 16.4 mg/L for mid ebb) AND CS(Mf)5: 7.37 x 120% = 8.8 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 13.68 x 130% = 17.8 mg/L for mid ebb) AND CS(Mf)5: 7.37 x 130% = 9.6 mg/L for mid flood)	23.9	15.9

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 21 March 2014, an AL exceedance was recorded at station SR5 during mid-ebb tide.

The exceedance has been investigated and is considered unlikely to be related to contract works due to the following reasons:

1. Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations SR5 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
SR5	6.7 to 16.5	6.5 to 31.2

The measured value at station SR5 was above the range of suspended solid during baseline monitoring for mid-ebb tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

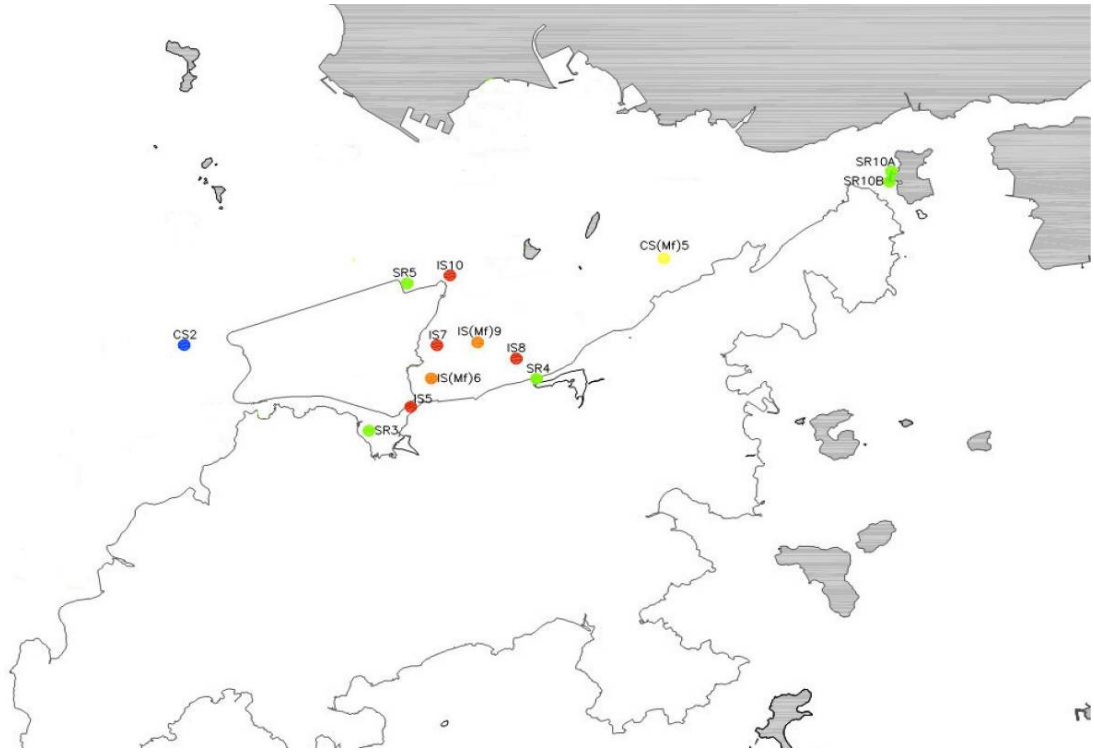
3. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 4 April 2014

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.: 177				
Date of Notification: 11 April 2014				
Works Inspected: 24-hr TSP monitoring was undertaken on 20 March 2014 and the test report was issued on 26 March 2014				
Monitoring Location: AMS6 – Dragon Air Building (AMS6)				
Parameter: 24-hour TSP monitoring				
Action & Limit Level (AL & LL) / Measured Level:				
<u>PARAMETER</u>	<u>STATION</u>	<u>AL ($\mu\text{g}/\text{m}^3$)</u>	<u>LL ($\mu\text{g}/\text{m}^3$)</u>	<u>MEASURED LEVEL, $\mu\text{g}/\text{m}^3$</u>
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	190
Notes: <i>Bold Italic</i> means AL exceedance <i><u>Bold Italic with underline</u></i> means LL exceedance				
Possible reason for Action or Limit Level Non-compliance: An Action Level exceedance of 24-hr TSP level was recorded at AMS6, Dragon Air Building, on 20 March 2014. According to the information provided by the Contractor, the following construction activities were undertaken during the sampling period:				
<u>Zone 1</u> - Geotextile tube installation - Formation of stone platform - Rock fill - Stone column installation				
<u>Zone 2</u> - Transfer of fill material - Formation of stone platform - Formation of seawall - Stone column installation				
<u>Zone 3A</u> - Transfer of fill material - Formation of stone platform - Formation of seawall				
The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The Air Quality Health Index (AQHI) recorded by EPD at the Tung Chung station during the sampling time ranged from 3 (low) to 8 (very high). Therefore, it is considered that the exceedance was not related to the construction activities of the Contract and was caused by poor weather condition.				
Actions taken/ to be taken: As the 24-hr TSP exceedance was not related to project works, no immediate actions are considered necessary. However, the Contractor is reminded to suppress potential dust generation during the construction works.				

Reviewed by : Claudine Lee Title : ET Leader


Date : 11 April 2014

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



Chek Lap Kok Ferry Pier
赤鱸角碼頭

Hong Kong International Airport
香港國際機場

AMS6

Zone 1
區域 1

Zone 2
區域 2

Zone 3A
區域 3A

Zone 3B
區域 3B

Zone 3C
區域 3C

Scenic Hill
觀景山

Tung Chung Pier
東涌碼頭

Tung Chung New Town
東涌新市鎮



環境保護署

噪音管制監督

Environmental Protection Department Noise Control Authority

圖例 Legend



Zone 1
區域 1



Zone 2
區域 2



Zone 3A
區域 3A



Zone 3B
區域 3B



Zone 3C
區域 3C

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.: 178

Date of Notification: 11 April 2014

Works Inspected: Data collected from water sampling works on 26 March 2014 and the test report was issued on 2 April 2014.

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)
SS	IS(Mf)9	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.12 x 120% = 4.9 mg/L for mid ebb) AND CS(Mf)5: 2.77x 120% = 3.3 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.12 x 130% = 5.4 mg/L for mid ebb) AND CS(Mf)5: 2.77 x 130% = 3.6 mg/L for mid flood)	6.9	26.6

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 26 March 2014, an AL exceedance was recorded at station IS(Mf)9 during mid-flood tide.

The exceedance has been investigated and is considered unlikely to be related to contract works due to the following reasons:

- Geotextile tube installation, formation of stone platform stone column installation and Rock fill at Zone 1, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at station IS(Mf)9 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
IS(Mf)9	5.5 to 20.1	7.3 to 26

The measured value at station IS(Mf)9 was slightly above the range of suspended solid during baseline monitoring for mid-ebb tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

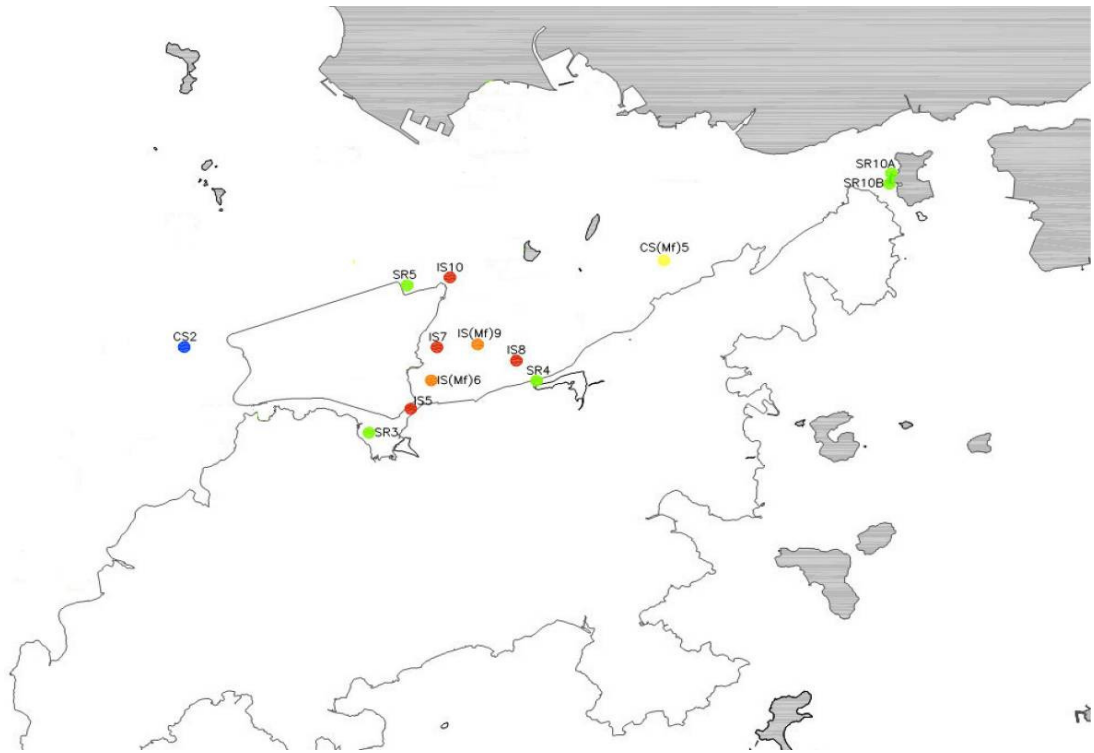
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 11 April 2014

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.: 179

Date of Notification: 11 April 2014

Works Inspected: Data collected from water sampling works on 31 March 2014 and the test report was issued on 7 April 2014.

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)
SS	IS7	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 18.75 x 120% = 22.5 mg/L for mid ebb) AND CS(Mf)5: 21.37 x 120% = 25.6 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 18.75x 130% = 24.4 mg/L for mid ebb) AND CS(Mf)5: 31.37 x 130% = 27.8 mg/L for mid flood)	11.8	28.2
SS	IS(Mf)9	DA			19.5	28.1
SS	IS10	DA			26.7	23.5

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 31 March 2014, an AL exceedance at station IS10 was recorded during mid-ebb tide and AL exceedances at IS7 and IS(Mf)9 were recorded during mid-flood tide.

The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

- Formation of stone platform, Stone column installation and Rock fill at Zone 1 and Formation of stone platform at Zone 2, were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at stations IS7, IS(Mf)9 and IS10 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	
IS7	6.1	to	21	7.8 to 34
IS(Mf)9	5.5	to	20.1	7.3 to 26
IS10	6.1	to	20.2	7.2 to 16

The measured values at stations IS7 was within the range of suspended solid during baseline monitoring for mid-flood tide. The measured value at station IS(Mf)9 for mid-flood tide and the measured value at station IS10 for mid-ebb tide were above the range of suspended solid during baseline monitoring. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

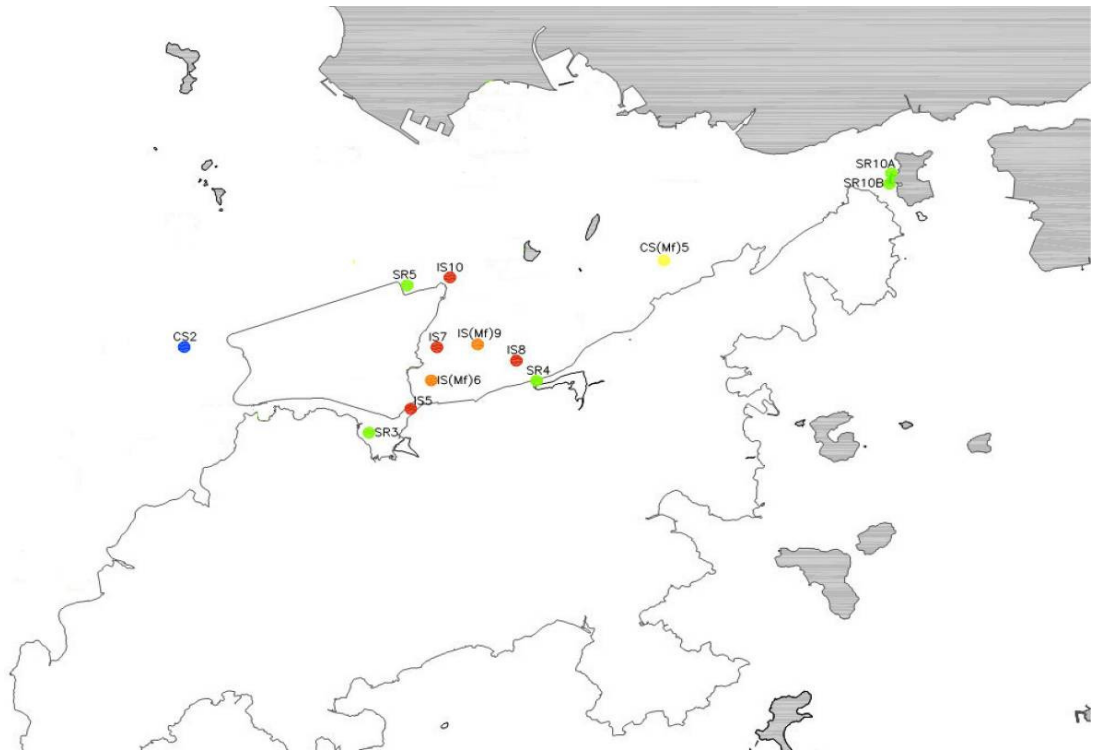
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 11 April 2014

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.: 180

Date of Notification: 24 April 2014

Works Inspected: Data collected from water sampling works on 2 April 2014 and the test report was issued on 9 April 2014.

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)
SS	IS5	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 8.43 x 120% = 10.1 mg/L for mid ebb) AND CS(Mf)5: 9.25 x 120% = 11.1 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 8.43x 130% = 11.0 mg/L for mid ebb) AND CS(Mf)5: 9.25 x 130% = 12.0 mg/L for mid flood)	27.1	16.8

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 2 April 2014, an AL exceedance was recorded at station IS5 during mid-ebb tide.

The exceedance has been investigated and is considered unlikely to be related to contract works due to the following reasons:

- Formation of stone platform, rock fill, stone column installation, geotextile tube installation at Zone 1, formation of stone platform at Zone 2, formation of seawall and deposition of rock core at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at station IS5 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
IS5	8.1 to 25.7	7 to 23.7

The measured value at station IS5 was above the range of suspended solid during baseline monitoring for mid-ebb tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

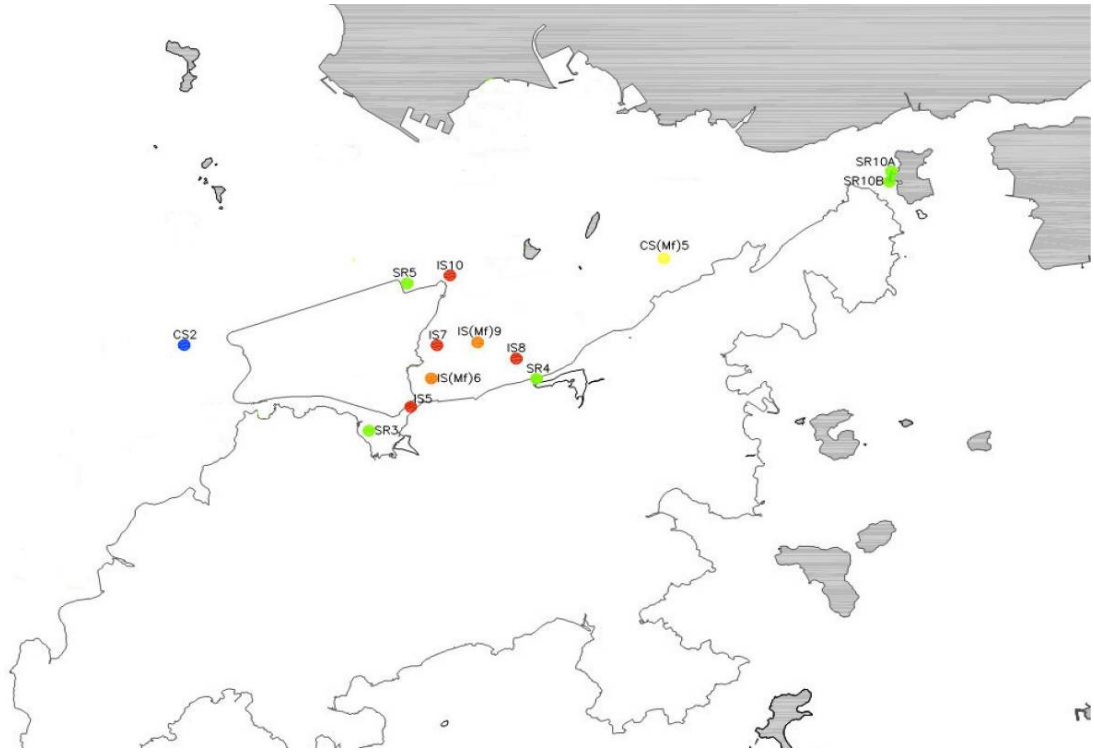
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 24 April 2014

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.: 181

Date of Notification: 6 June 2014

Works Inspected: Data collected from water sampling works on 14 May 2014 and the test report was issued on 22 May 2014.

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)
SS	SR4	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.48 x 120% = 5.4 mg/L for mid ebb) AND CS(Mf)5: 5.28 x 120% = 6.3 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.48 x 130% = 5.8 mg/L for mid ebb) AND CS(Mf)5: 5.28 x 130% = 6.9 mg/L for mid flood)	5.5	<u>36.7</u>

Notes:
 DA means depth average.
Bold Italic means AL exceedances.
Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 14 May 2014, a LL exceedance was recorded at station SR4 during mid-flood tide.

The exceedance has been investigated and is considered unlikely to be related to contract works due to the following reasons:

- Formation of seawall, rock fill and stone column work at Zone 1, formation of seawall at Zone 2, formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- The ranges of suspended solid at station SR4 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
SR4	5.3 to 20	5.6 to 24.5

The measured value at station SR4 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

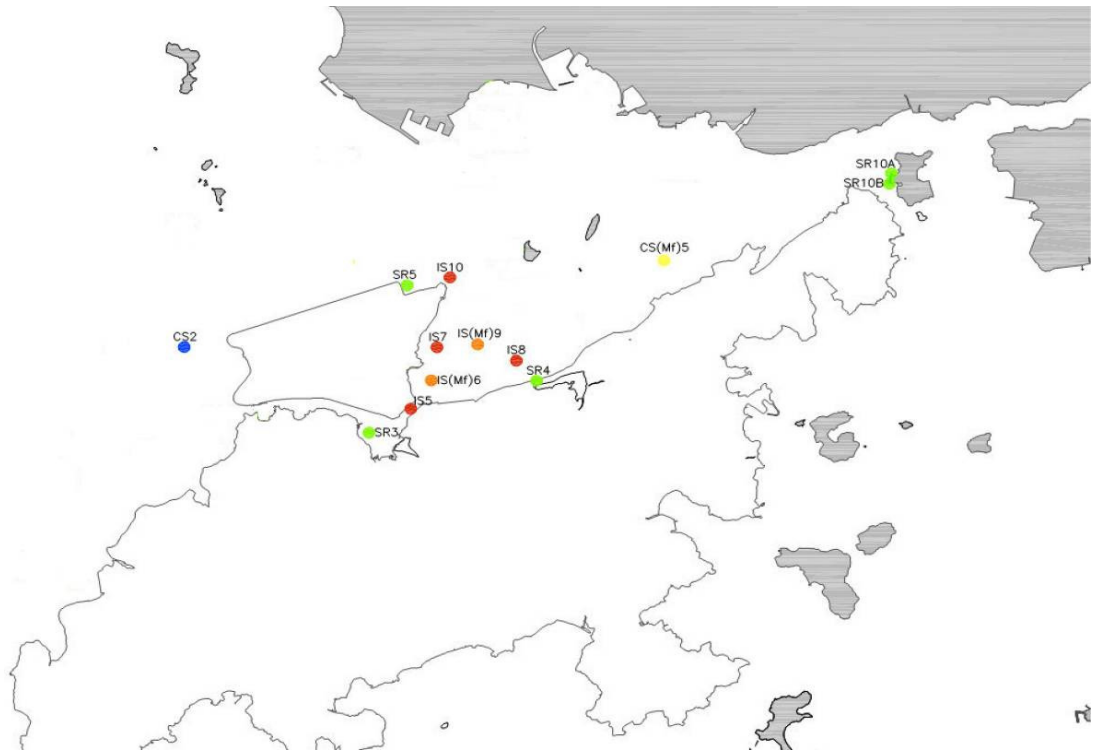
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid level is considered to be attributed to other external factors, rather than the contract works.

Actions taken/ to be taken:

As the suspended solid level recorded beyond the water quality criteria is not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 6 June 2014

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.: 182 ver0

Date of Notification: 18 June 2014

Works Inspected: Not Applicable

Monitoring Location: NEL & NWL

Parameter: Ecology (Chinese White Dolphin Monitoring)

Action & Limit Levels		Monitoring Results					
	North Lantau Social Cluster	The quarter of March 2014 - May 2014					
	<table border="1" style="width: 100%;"> <tr> <th style="width: 50%;">Action Level (AL)</th> <th style="width: 50%;">Limit Level (LL)</th> </tr> <tr> <td>Northeast Lantau (NEL) STG < 4.2 & ANI < 15.4</td> <td>NEL: (STG < 2.4 & ANI < 8.9) and NWL: (STG < 3.9 & ANI < 17.9)</td> </tr> <tr> <td>Northwest Lantau (NWL) STG < 6.9 & ANI < 31.3</td> <td></td> </tr> </table>		Action Level (AL)	Limit Level (LL)	Northeast Lantau (NEL) STG < 4.2 & ANI < 15.4	NEL: (STG < 2.4 & ANI < 8.9) and NWL: (STG < 3.9 & ANI < 17.9)	Northwest Lantau (NWL) STG < 6.9 & ANI < 31.3
Action Level (AL)	Limit Level (LL)						
Northeast Lantau (NEL) STG < 4.2 & ANI < 15.4	NEL: (STG < 2.4 & ANI < 8.9) and NWL: (STG < 3.9 & ANI < 17.9)						
Northwest Lantau (NWL) STG < 6.9 & ANI < 31.3							
		STG = 0; ANI = 0					
		STG = 6.51; ANI = 19.14					

- Notes:
- STG means quarterly encounter rate of number of dolphin sightings.
 - ANI means quarterly encounter rate of total number of dolphins.
 - For North Lantau Social Cluster, AL will be triggered if either NEL or NWL falls below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.
 - Bold Italic*** means AL exceedances.
 - Bold Italic with underline*** means LL exceedances

Possible reason for Action Level Non-compliance:

According to the contractor's information, the marine activities undertaken for HKLR03 during the two quarterly periods (December 2013 to February 2014 and March 2014 to May 2014) included stone platform construction, reclamation, stone column installation and excavation of stone platform, surcharge activities, construction of seawall and geotextile tube installation works.

There is no evidence showing the current AL non-compliance directly related to the construction works of HKLR03, although the generally increased amount of vessel traffic in NEL during the impact phase has been partly contributed by HKLR03 works since October 2012. It should also be noted that reclamation work under HKLR03 (adjoining the Airport Island) situates in waters which has rarely been used by dolphins in the past, and the working vessels under HKLR03 have been travelling from source to destination in accordance with the Marine Travel Route to minimize impacts on Chinese White Dolphin. In addition, the contractor will implement proactive mitigation measures such as avoiding anchoring at Marine Department's designated anchorage site – Sham Shui Kok Anchorage (near Brothers Island) as far as practicable.

Actions taken/ to be taken:

Inform the IEC, ER/SOR and Contractor
The ETL informed IEC, ENPO SOR and Contractor via email on 10 June 2014.

Repeat statistical data analysis to confirm findings and check monitoring data:
A two-way ANOVA with repeated measures and unequal sample size was conducted to examine whether there were any significant differences in the average encounter rates between the baseline and impact monitoring periods. The two variables that were examined included the two periods (baseline and impact phases) and two locations (NEL and NWL).
For the comparison between the baseline period and the present quarter (sixth quarter of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.0337 and 0.0535 respectively. If the alpha value is set at 0.1, significant difference was detected between the baseline and present quarters in both encounter rates of STG and ANI.
For the comparison between the baseline period and the cumulative quarters in impact phase (i.e. first six quarters of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.0080 and 0.0032 respectively. Even if the alpha value is set at 0.01, significant difference was detected in both the average dolphin encounter rates of STG and ANI (i.e. between the two periods and the locations).

Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences:
The AFCD monitoring data during March to May 2014 has been reviewed by the dolphin specialist, and only one group of three dolphins was sighted from 88.43 km of survey effort on primary lines in NEL during the same quarter. This review has confirmed that the very low occurrence of dolphins reported by the HKLR03 monitoring survey in spring 2014 in NEL is accurate.

Identify source(s) of impact:
There is no evidence showing that the sources of impact directly related to the construction works of HKLR03 that may have affected the dolphin usage in the NEL region.

Recommendations/ mitigation measures/ actions if necessary:

Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary:

All dolphin protective measures are fully and properly implemented in accordance with the EM&A Manual. The Contractor will continue to provide training to skippers to ensure that their working vessels travel from source to destination to minimize impacts on Chinese White Dolphin and avoid anchoring at Marine Department's designated anchorage site - Sham Shui Kok Anchorage (near Brothers Island) as far as practicable.

Reviewed by : Claudine Lee Title : ET Leader



Copied to : Supervising Officer, ENPO, IEC, EPD, Contractor Date : 18 June 2014

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