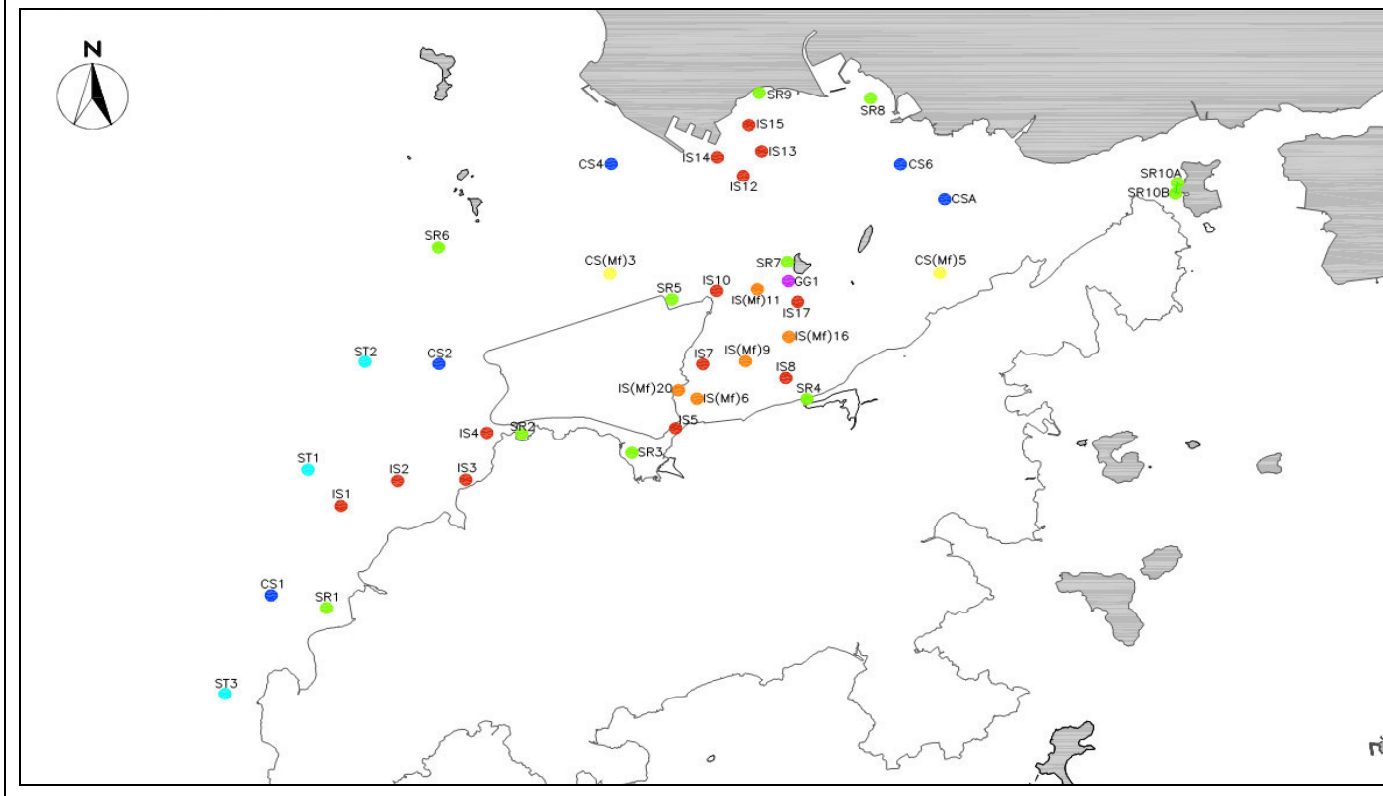


Contract No. HY/2011/03 - Hong Kong- Zhuhai- Macao Bridge Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities Notifications of Environmental Quality Limits Exceedances					Notification No.: 088	
Date of Notification: 14 February 2013						
Works Inspected: Data collected from water sampling works on 1 February 2013 and the results were issued on 4 February 2013						
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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 3.68 x 120% = 4.4 for mid ebb AND CS(Mf)5: 4.60 x 120% = 5.5 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 3.68 x 130% = 4.8 for mid ebb AND CS(Mf)5: 4.60 x 130% = 6.0 for mid flood)	<u>6.2</u>	<u>8.4</u>
TURB	IS(Mf)6	DA			<u>8.3</u>	<u>6.4</u>
TURB	IS7	DA			4.4	<u>7.2</u>
TURB	IS8	DA			<u>6.8</u>	4.3
TURB	IS(Mf)9	DA			<u>5.7</u>	5.2
TURB	IS10	DA			2.7	<u>5.9</u>
TURB	SR3	DA			<u>5.5</u>	<u>11.2</u>
Notes: DA means depth average. <i>Bold Italic</i> means AL exceedances. <i>Bold Italic with underline</i> means LL exceedances.						
Possible reason for Action or Limit Level Non-compliance:						
On 1 February 2013, exceedances of LL at stations IS5, IS(Mf)6, IS8, IS(Mf)9 and SR3 were recorded during mid-ebb tide. An exceedance of AL at station IS10 and LL exceedances at stations IS5, IS(Mf)6, IS7 and SR3 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 reason:						
1. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10 and SR3 during the baseline monitoring is shown as below:						
Station		Range of Turbidity(NTU) Mid-Ebb Tide			Range of Turbidity(NTU) Mid-Flood Tide	
IS5		5.8 to 19.2			5.7 to 21.4	
IS(Mf)6		3.3 to 21.7			5.3 to 20.9	
IS7		3.4 to 20			5 to 19.4	
IS8		4 to 12.2			4.5 to 24.5	
IS(Mf)9		2.7 to 17			3.4 to 22.6	
SR10		2.6 to 11.4			1.9 to 13	
SR3		4.6 to 65.7			7.7 to 19.7	
The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10 and SR3 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.						
2. 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 turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.						

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

Date : 14 February 2013

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

Date of Notification: 14 February 2013

Works Inspected: Data collected from water sampling works on 4 February 2013 and the results were issued on 5 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 2.72 x 120% = 3.3 for mid ebb AND CS(Mf)5: 2.00 x 120% = 2.4 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 2.72 x 130% = 3.5 for mid ebb AND CS(Mf)5: 2.00 x 130% = 2.6 for mid flood)	<u>5.4</u>	<u>5.8</u>
TURB	IS(Mf)6	DA			<u>9.8</u>	<u>7.1</u>
TURB	IS7	DA			<u>4.1</u>	<u>8.9</u>
TURB	IS8	DA			3.4	<u>4.6</u>
TURB	IS(Mf)9	DA			2.9	<u>4.5</u>
TURB	IS10	DA			3.0	<u>6.9</u>
TURB	SR3	DA			<u>6.9</u>	<u>6.9</u>
TURB	SR4	DA			<u>4.3</u>	<u>3.3</u>
TURB	SR5	DA			3.3	<u>5.4</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 4 February 2013, an exceedance of AL at station IS8 and LL exceedances at stations IS5, IS(Mf)6, IS7, SR3 and SR4 were recorded during mid-ebb tide. Exceedances of LL at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 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 reason:

- The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
SR10	6.7	to 14.7	8.4	to 20.8
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR5	5.2	to 12.4	7.1	to 30.9

The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

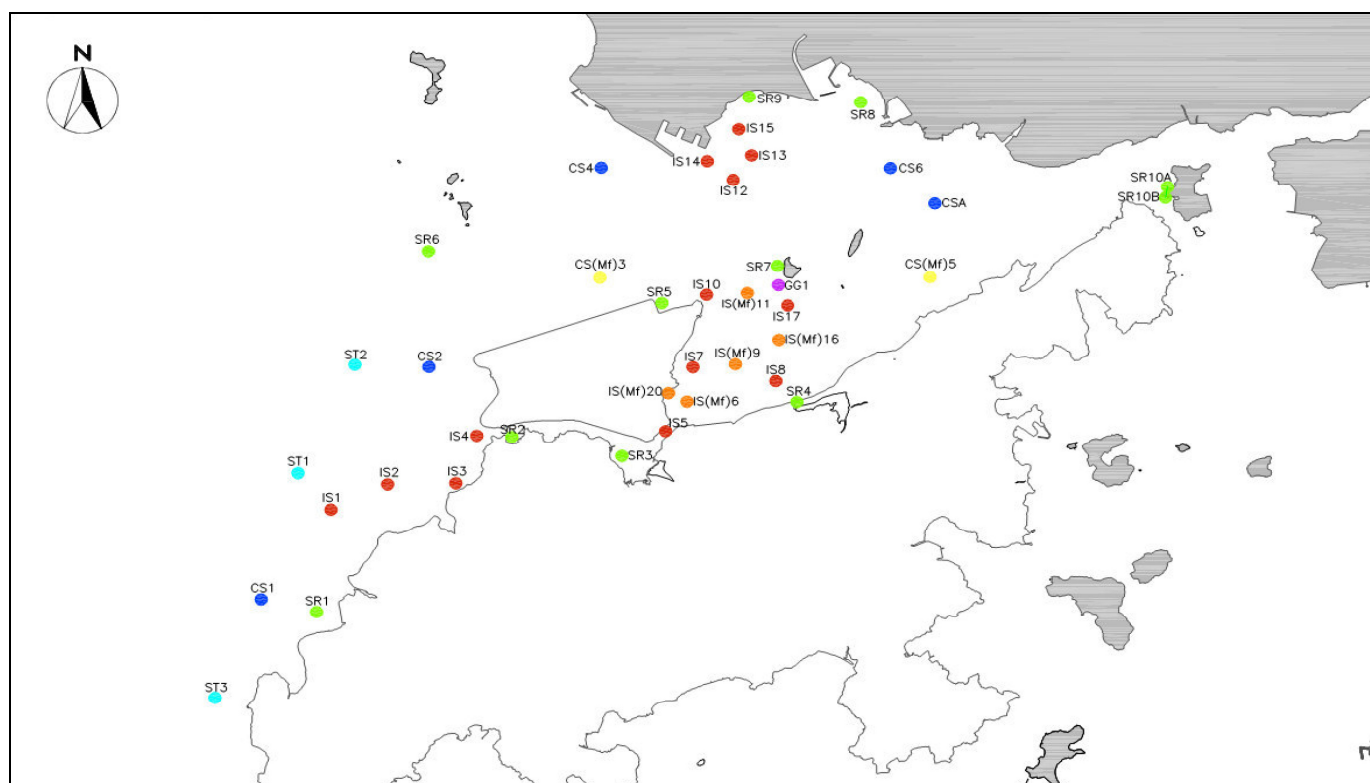
2. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
3. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 14 February 2013

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

Date of Notification: 14 February 2013

Works Inspected: Data collected from water sampling works on 6 February 2013 and the results were issued on 6 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.23 \times 120\% = 2.7$ for mid ebb AND CS(Mf)5: $1.40 \times 120\% = 1.7$ for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.23 \times 130\% = 2.9$ for mid ebb AND CS(Mf)5: $1.40 \times 130\% = 1.8$ for mid flood)	<u>3.8</u>	<u>3.5</u>
TURB	IS(Mf)6	DA			<u>6.9</u>	<u>8.8</u>
TURB	IS7	DA			<u>3.4</u>	<u>3.2</u>
TURB	IS8	DA			<u>3.3</u>	<u>3.8</u>
TURB	IS(Mf)9	DA			<u>3.9</u>	<u>5.3</u>
TURB	IS10	DA			2.1	<u>2.9</u>
TURB	SR3	DA			<u>3.2</u>	<u>2.7</u>
TURB	SR4	DA			<u>3.0</u>	<u>4.6</u>
TURB	SR5	DA			<u>3.2</u>	1.7
TURB	SR10A	DA			1.6	<u>2.1</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 6 February 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 were recorded during mid-ebb tide. Exceedances of LL at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR10A 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 reason:

- The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
SR10	6.7	to 14.7	8.4	to 20.8
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6

Station	Range of Turbidity(NTU)		Range of Turbidity(NTU)	
	Mid-Ebb Tide		Mid-Flood Tide	
SR5	5.2	to	12.4	7.1 to 30.9
SR10A	2.6	to	11.4	1.9 to 13

The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

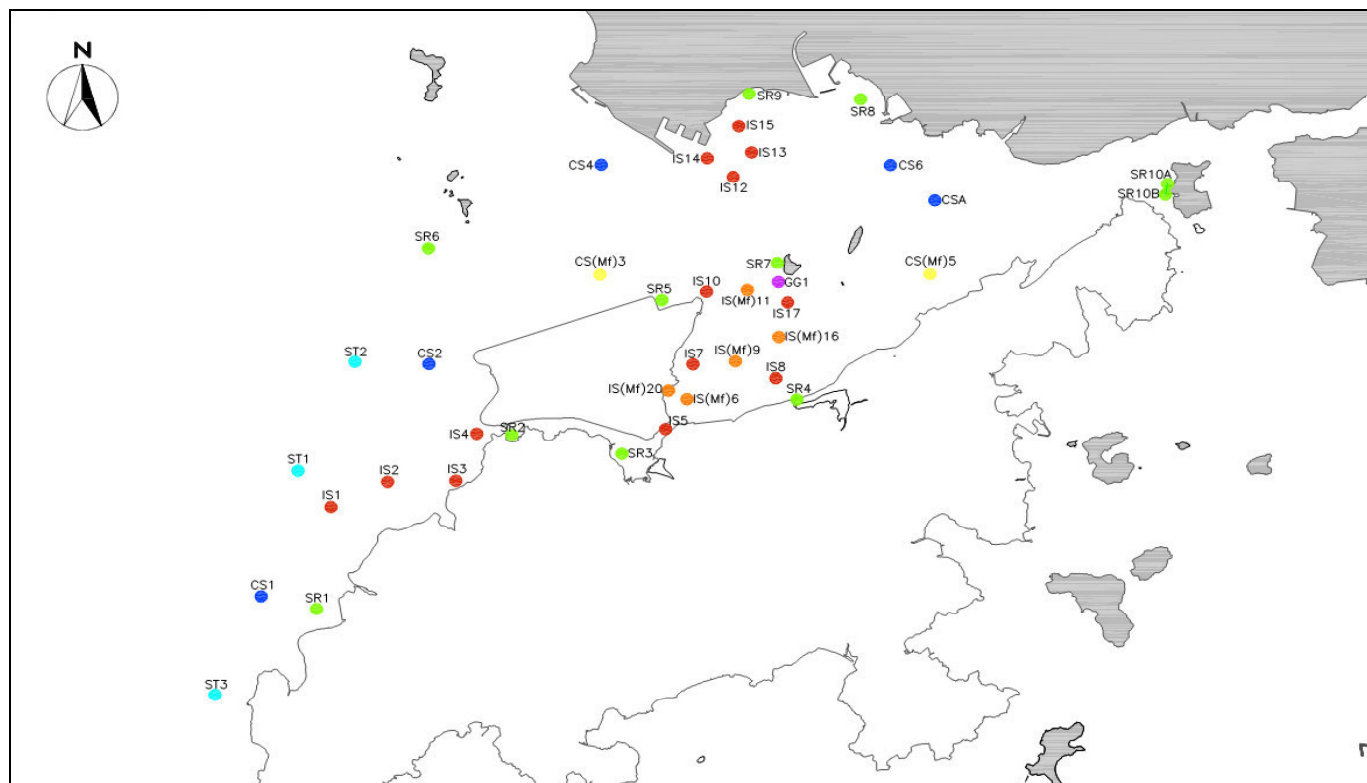
2. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
3. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 14 February 2013

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.: 092

Date of Notification: 20 Feb 2013

Works Inspected: Data collected from water sampling works on 01 February 2013 and the test report was issued on 08 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 7.42 x 120% = 8.9 mg/L for mid ebb) AND CS(Mf)5: 3.97 x 120% = 4.8 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 7.42 x 130% = 9.6 mg/L for mid ebb) AND CS(Mf)5: 3.97 x 130% = 5.2 mg/L for mid flood)	6.7	<u>12.5</u>
SS	IS(Mf)6	DA			3.9	<u>5.3</u>
SS	IS7	DA			4.4	<u>8.7</u>
SS	IS8	DA			6.7	<u>5.7</u>
SS	IS(Mf)9	DA			4.9	<u>6.3</u>
SS	IS10	DA			2.8	<u>5.1</u>
SS	SR3	DA			7.1	<u>16.1</u>
SS	SR5	DA			7.5	<u>6.0</u>
SS	SR10B	DA			3.3	<u>5.9</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 1 February 2013, an exceedance of AL at station at IS10 and LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 SR5 and SR10B were recorded for the mid-flood tide.

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

1. The sand filling activities were carried within silt curtain as recommended in the EIA report.
2. The ranges of suspended solid at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3,SR5 and SR10B and 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR5	6.7	to	16.5	6.5	to	31.2
SR10B	3.1	to	30.8	5.7	to	26.7

The measured values at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR5 and SR10B were within the ranges of

suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

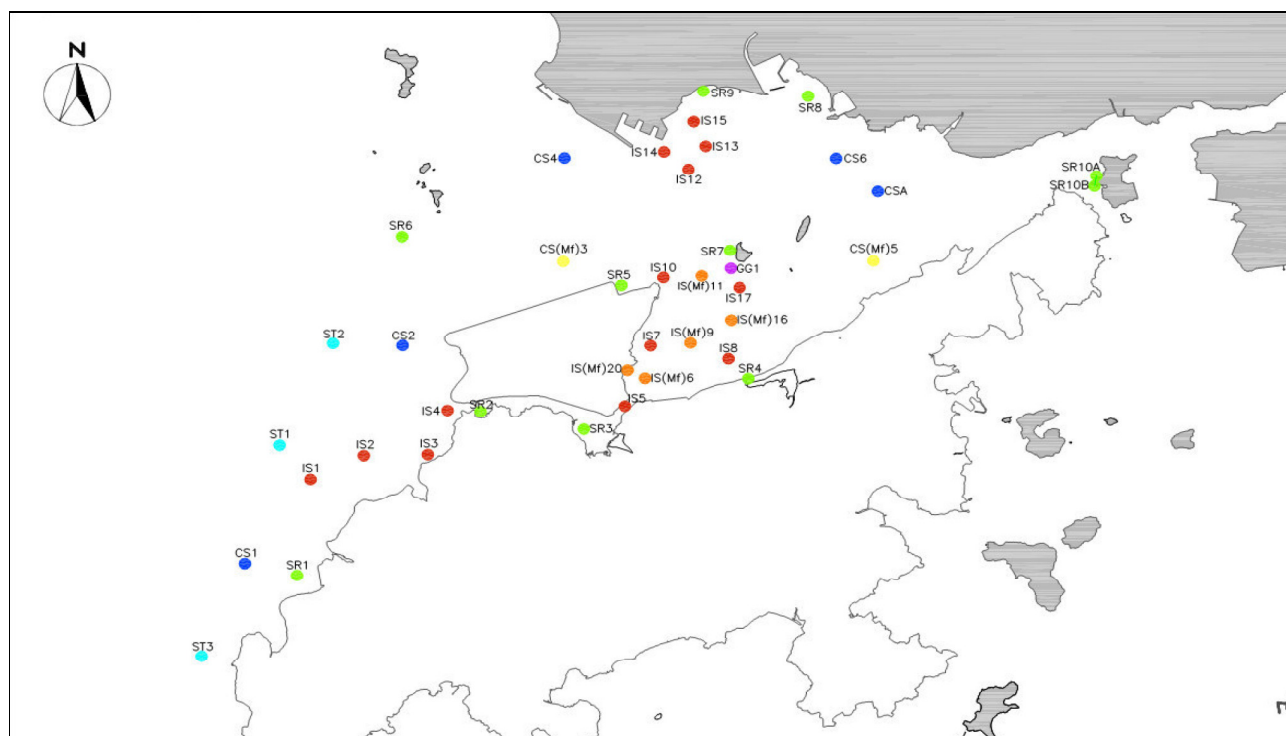
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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.: 093

Date of Notification: 20 Feb 2013

Works Inspected: Data collected from water sampling works on 04 February 2013 and the test report was issued on 14 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.13 x 120% = 5.0 mg/L for mid ebb) AND CS(Mf)5: 2.58 x 120% = 3.1 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.13 x 130% = 5.4 mg/L for mid ebb) AND CS(Mf)5: 2.58 x 130% = 3.4 mg/L for mid flood)	4.7	<u>6.4</u>
SS	IS(Mf)6	DA			<u>6.5</u>	<u>5.9</u>
SS	IS7	DA			3.7	<u>4.7</u>
SS	IS8	DA			2.9	<u>3.7</u>
SS	IS(Mf)9	DA			2.9	<u>5.2</u>
SS	IS10	DA			2.9	<u>5.2</u>
SS	SR3	DA			<u>6.4</u>	<u>7.2</u>
SS	SR5	DA			<u>6.2</u>	<u>3.9</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 4 February 2013, exceedances of LL at stations IS(Mf)6, SR3 and SR5 were recorded for the mid-ebb tide. Exceedances for LL at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 and SR5 were recorded for mid-flood tide

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

1. The rock and sand filling activities were carried within silt curtain as recommended in the EIA report.
2. The ranges of suspended solid at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 and SR5 and 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR5	6.7	to	16.5	6.5	to	31.2

The measured values at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the

monitoring results.

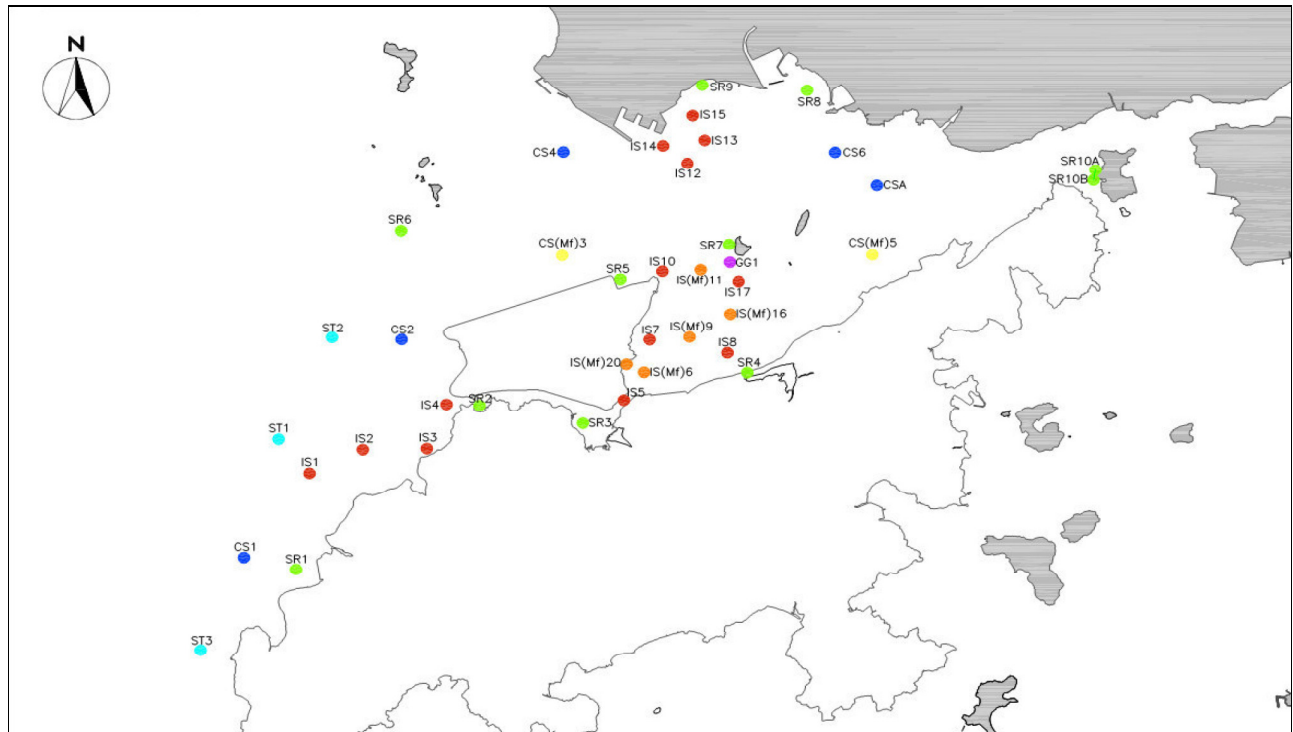
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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

Date of Notification: 20 February 2013

Works Inspected: Data collected from water sampling works on 8 February 2013 and the results were issued on 14 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.55 \times 120\% = 3.1$ for mid ebb AND CS(Mf)5: $2.00 \times 120\% = 2.4$ for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.55 \times 130\% = 3.3$ for mid ebb AND CS(Mf)5: $2.00 \times 130\% = 2.6$ for mid flood)	<u>5.3</u>	<u>5.9</u>
TURB	IS(Mf)6	DA			<u>13.6</u>	<u>7.2</u>
TURB	IS7	DA			<u>5.6</u>	<u>6.6</u>
TURB	IS8	DA			<u>3.8</u>	<u>4.7</u>
TURB	IS(Mf)9	DA			<u>4.8</u>	<u>5.8</u>
TURB	IS10	DA			2.8	2.6
TURB	SR3	DA			<u>3.9</u>	<u>4.1</u>
TURB	SR4	DA			<u>5.0</u>	<u>4.5</u>
TURB	SR5	DA			<u>4.0</u>	<u>5.8</u>
TURB	SR10A	DA			2.3	2.5
TURB	SR10B	DA			3.1	2.5

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 8 February 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 were recorded during mid-ebb tide. AL exceedances at stations IS10, SR10A and SR10B and exceedances of LL at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 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 reason:

1. Cleaning of stone platform was carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5, SR10A and SR10B during the baseline monitoring is shown as below

Station	Range of Turbidity(NTU) Mid-Ebb Tide			Range of Turbidity(NTU) Mid-Flood Tide		
IS5	5.8	to	19.2	5.7	to	21.4
IS(Mf)6	3.3	to	21.7	5.3	to	20.9
IS7	3.4	to	20	5	to	19.4
IS8	4	to	12.2	4.5	to	24.5
IS(Mf)9	2.7	to	17	3.4	to	22.6
SR10	6.7	to	14.7	8.4	to	20.8
SR3	4.6	to	65.7	7.7	to	19.7
SR4	5.2	to	18.9	5	to	20.6
SR5	5.2	to	12.4	7.1	to	30.9
SR10A	2.6	to	11.4	1.9	to	13
SR10B	1.7	to	13.6	1.7	to	13.2

The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5, SR10A and SR10B were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

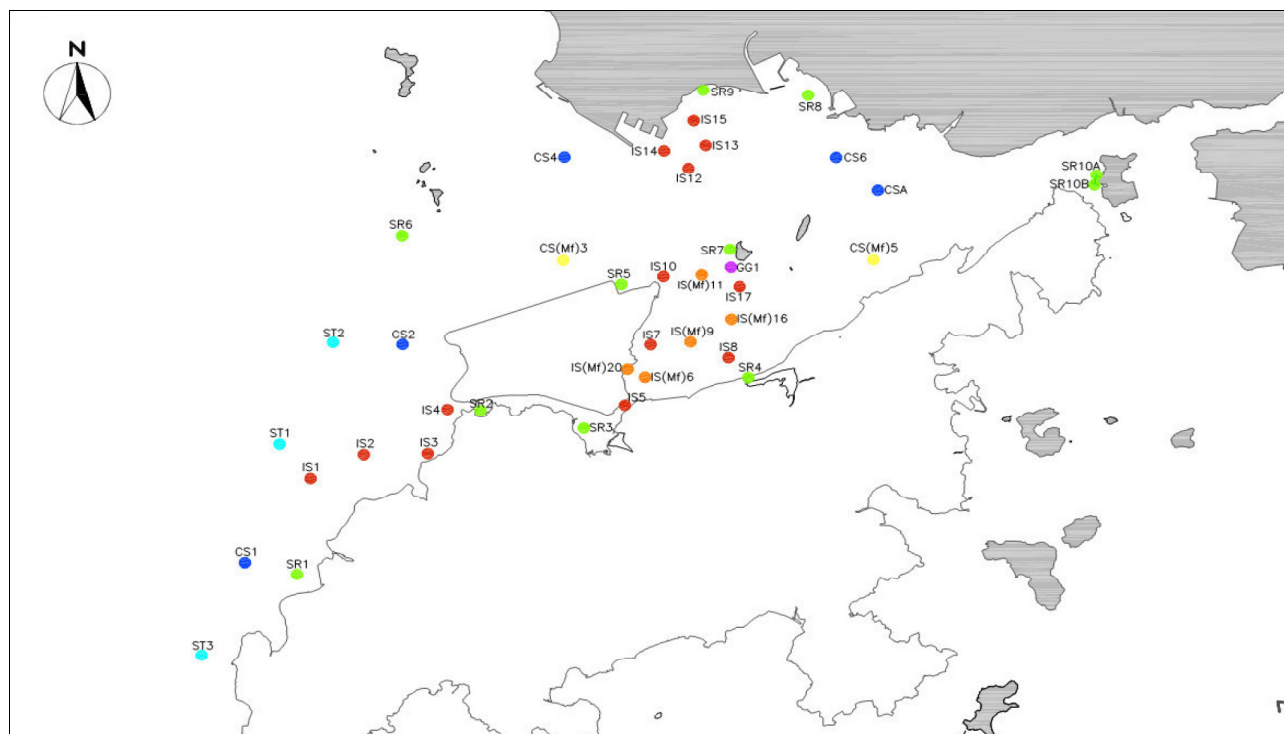
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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

Date of Notification: 20 February 2013

Works Inspected: Data collected from water sampling works on 11 February 2013 and the results were issued on 14 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.10 \times 120\% = 2.5$ for mid ebb AND CS(Mf)5: $2.05 \times 120\% = 2.5$ for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $2.10 \times 130\% = 2.7$ for mid ebb AND CS(Mf)5: $2.05 \times 130\% = 2.7$ for mid flood)	<u>3.9</u>	<u>3.2</u>
TURB	IS(Mf)6	DA			<u>9.2</u>	<u>4.2</u>
TURB	IS7	DA			<u>4.4</u>	<u>4.4</u>
TURB	IS8	DA			<u>3.4</u>	<u>3.3</u>
TURB	IS(Mf)9	DA			<u>5.5</u>	2.6
TURB	SR3	DA			<u>3.3</u>	<u>3.6</u>
TURB	SR4	DA			<u>3.7</u>	<u>3.2</u>
TURB	SR10A	DA			2.2	<u>3.0</u>
TURB	SR10B	DA			2.2	<u>3.0</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 11 February 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, and SR4 were recorded during mid-ebb tide. An AL exceedance at station IS(Mf)9 and exceedances of LL at stations IS5, IS(Mf)6, IS7, IS8, SR3, SR4, SR10A and SR10B 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 reason:

1. No marine activities were in operation during the sampling date (Chinese New Year).
2. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4, SR10A and SR10B during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR10A	2.6	to 11.4	1.9	to 13
SR10B	1.7	to 13.6	1.7	to 13.2

The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4, SR10A and SR10B were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

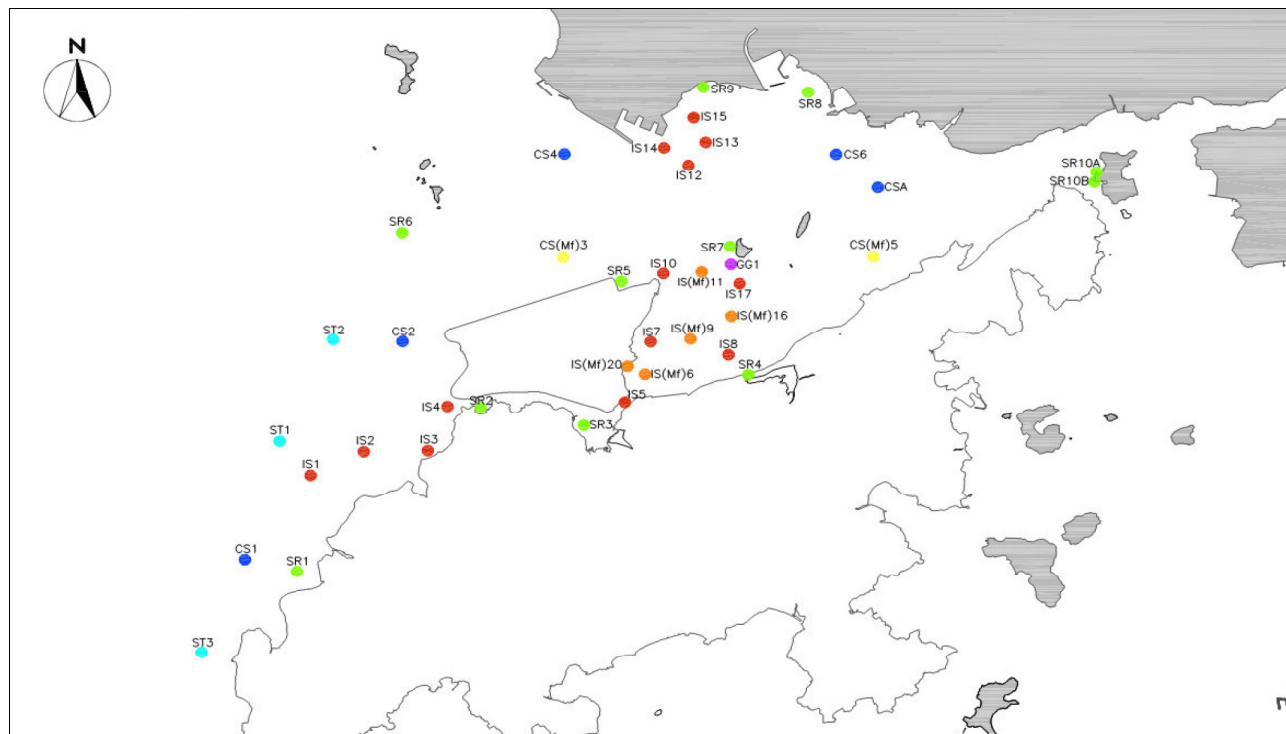
As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the

contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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

Date of Notification: 20 February 2013

Works Inspected: Data collected from water sampling works on 13 February 2013 and the results were issued on 14 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 2.60 x 120% = 3.1 for mid ebb AND CS(Mf)5: 2.73 x 120% = 3.3 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 2.60 x 130% = 3.4 for mid ebb AND CS(Mf)5: 2.73 x 130% = 3.6 for mid flood)	<u>3.5</u>	<u>4.6</u>
TURB	IS(Mf)6	DA			3.4	3.6
TURB	IS7	DA			<u>3.5</u>	3.1
TURB	IS8	DA			<u>3.5</u>	<u>3.9</u>
TURB	IS(Mf)9	DA			<u>3.6</u>	<u>3.8</u>
TURB	SR3	DA			<u>3.5</u>	<u>4.4</u>
TURB	SR4	DA			3.4	3.4
TURB	SR10A	DA			2.5	<u>4.6</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 13 February 2013, AL exceedances at stations IS(Mf)6 and SR4 and LL exceedances at stations IS5, IS7, IS8, IS(Mf)9 and SR3 were recorded during mid-ebb tide. AL exceedances at station IS(Mf)6 and SR4 and exceedances of LL at stations IS5, IS8, IS(Mf)9, SR3 and SR10A 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 reason:

1. No marine activities were in operation during the sampling date (Chinese New Year).
2. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR10A during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR10A	2.6	to 11.4	1.9	to 13

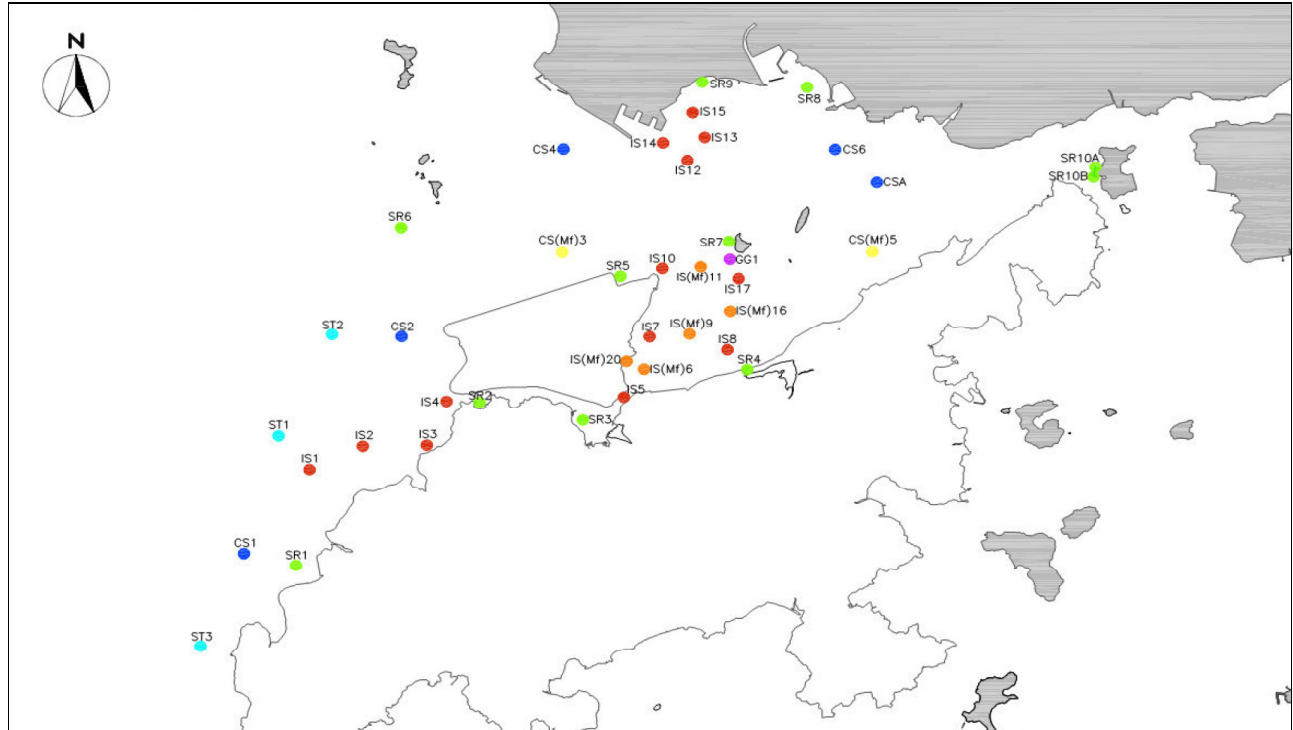
The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR10A were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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

Date of Notification: 20 February 2013

Works Inspected: Data collected from water sampling works on 15 February 2013 and the results were issued on 18 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.15 x 120% = 2.6 for mid ebb AND CS(Mf)5: 5.78 x 120% = 6.9 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.15 x 130% = 2.8 for mid ebb AND CS(Mf)5: 5.78 x 130% = 7.5 for mid flood)	2.8	3.0
TURB	IS(Mf)6	DA			4.0	3.0
TURB	IS7	DA			3.4	3.4
TURB	IS8	DA			3.0	3.8
TURB	IS(Mf)9	DA			2.9	4.6
TURB	SR3	DA			3.7	3.7
TURB	SR4	DA			2.8	3.7
TURB	SR5	DA			2.0	8.0

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 15 February 2013, AL exceedances at stations IS5 and SR4 and LL exceedances at IS(Mf)6, IS7, IS8, IS(Mf)9 and SR3 were recorded during mid-ebb tide. An exceedance of LL at SR5 was recorded during mid-flood tide.

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

1. The cleaning of stone platform activities were carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR5	5.2	to 12.4	7.1	to 30.9

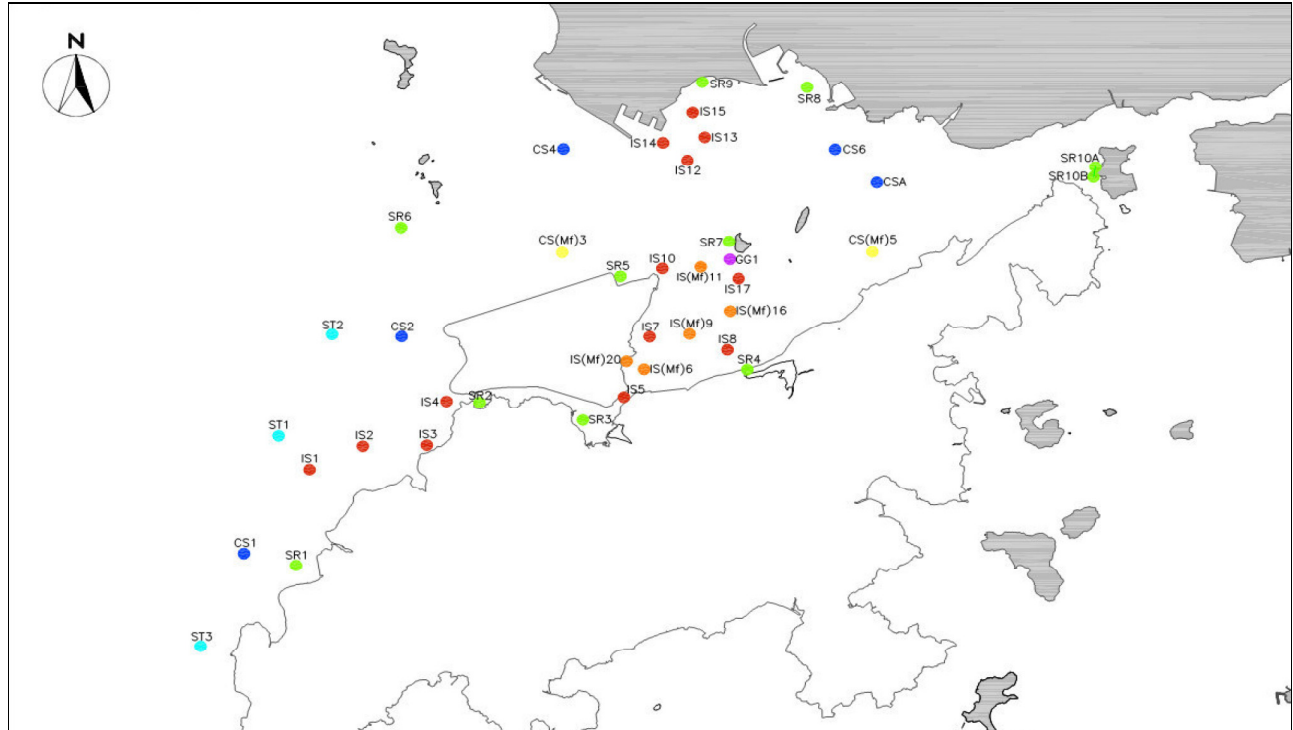
The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

Date : 20 February 2013

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

**ndContract 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.: 100

Date of Notification: 20 Feb 2013

Works Inspected: Data collected from water sampling works on 06 February 2013 and the test report was issued on 18 February 2013.

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)6	DA	23.5 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $3.50 \times 120\% = 4.2$ mg/L for mid ebb) AND CS(Mf)5: $3.88 \times 120\% = 4.7$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $3.50 \times 130\% = 4.6$ mg/L for mid ebb) AND CS(Mf)5: $3.88 \times 130\% = 5.0$ mg/L for mid flood)	<u>6.3</u>	4.8
SS	IS(Mf)9	DA			3.5	<u>5.3</u>
SS	SR5	DA			4.3	2.9

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 6 February 2013, an exceedance of AL at station SR5 and a LL exceedance at station IS(Mf)6 were recorded for the mid-ebb tide. An AL exceedance for station IS(Mf)6 and an exceedance for LL at stations IS(Mf)9 were recorded for mid-flood tide.

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

1. The sand filling and cleaning of stone platform activities were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at IS(Mf)6, IS(Mf)9 and SR5 and 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)6	7.1	to	19	8.5	to	35
IS(Mf)9	5.5	to	20.1	7.3	to	26
SR5	6.7	to	16.5	6.5	to	31.2

The measured values at IS(Mf)6, IS(Mf)9 and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

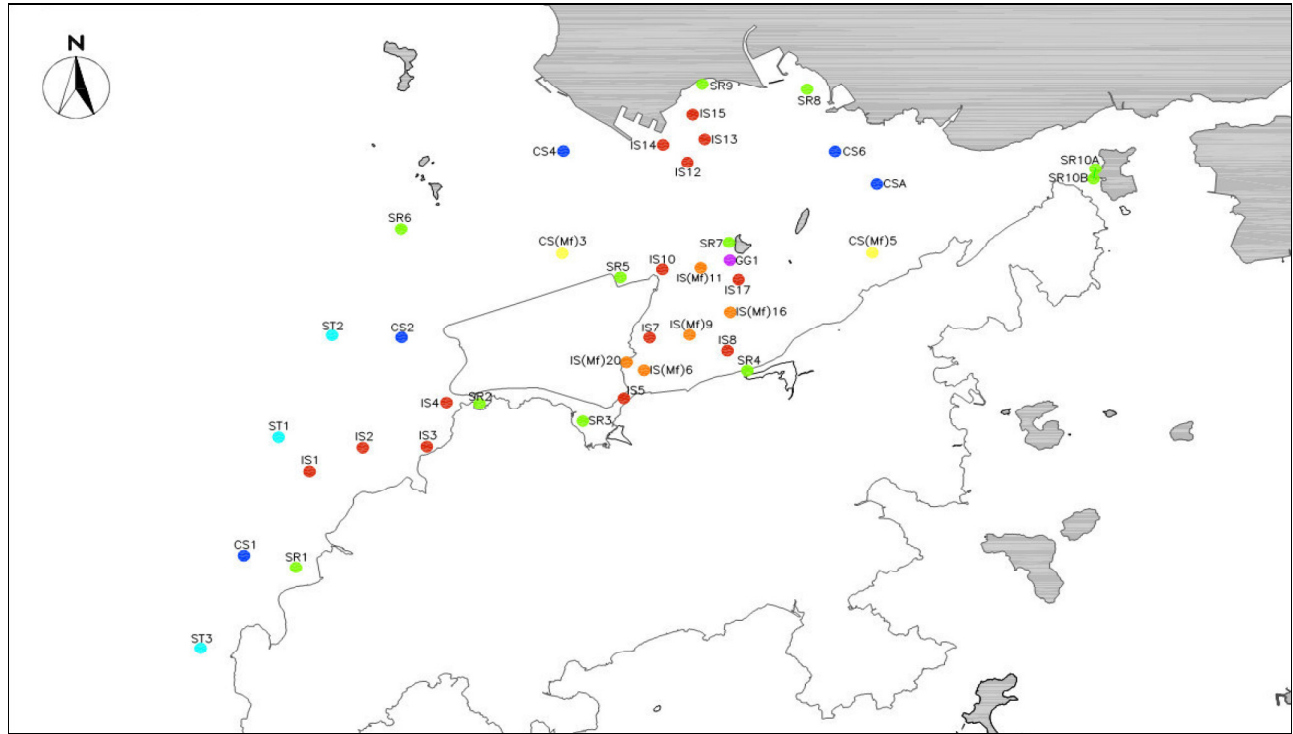
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 20 February 2013

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.: 101

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 18 February 2013 and the results were issued on 19 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS5	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.20 x 120% = 2.6 for mid ebb AND CS(Mf)5: 1.43 x 120% = 1.7 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.20 x 130% = 2.9 for mid ebb AND CS(Mf)5: 1.43 x 130% = 1.9 for mid flood)	2.4	<u>2.7</u>
TURB	IS(Mf)6	DA			<u>3.4</u>	<u>2.7</u>
TURB	IS7	DA			<u>4.4</u>	<u>3.1</u>
TURB	IS8	DA			<u>4.0</u>	<u>2.7</u>
TURB	IS(Mf)9	DA			<u>4.0</u>	<u>2.1</u>
TURB	IS10	DA			2.2	<u>4.7</u>
TURB	SR3	DA			<u>3.6</u>	<u>2.3</u>
TURB	SR4	DA			<u>4.5</u>	<u>2.3</u>
TURB	SR5	DA			1.8	<u>3.5</u>
TURB	SR10B	DA			1.9	<u>1.8</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 18 February 2013, LL exceedances at stations IS(Mf)6, IS7, IS8, IS(Mf)9, SR3 and SR4 were recorded during mid-ebb tide. An exceedance of AL at station SR10B and LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 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 reason:

1. The sand filling works were carried out at stone platform.
2. The range of turbidity at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10B during the baseline monitoring is shown as below

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS5	5.8	to 19.2	5.7	to 21.4
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS8	4	to 12.2	4.5	to 24.5
IS(Mf)9	2.7	to 17	3.4	to 22.6
IS10	6.7	to 14.7	8.4	to 20.8
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR5	5.2	to 12.4	7.1	to 30.9
SR10B	1.7	to 13.6	1.7	to 13.2

The measured value at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10B were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

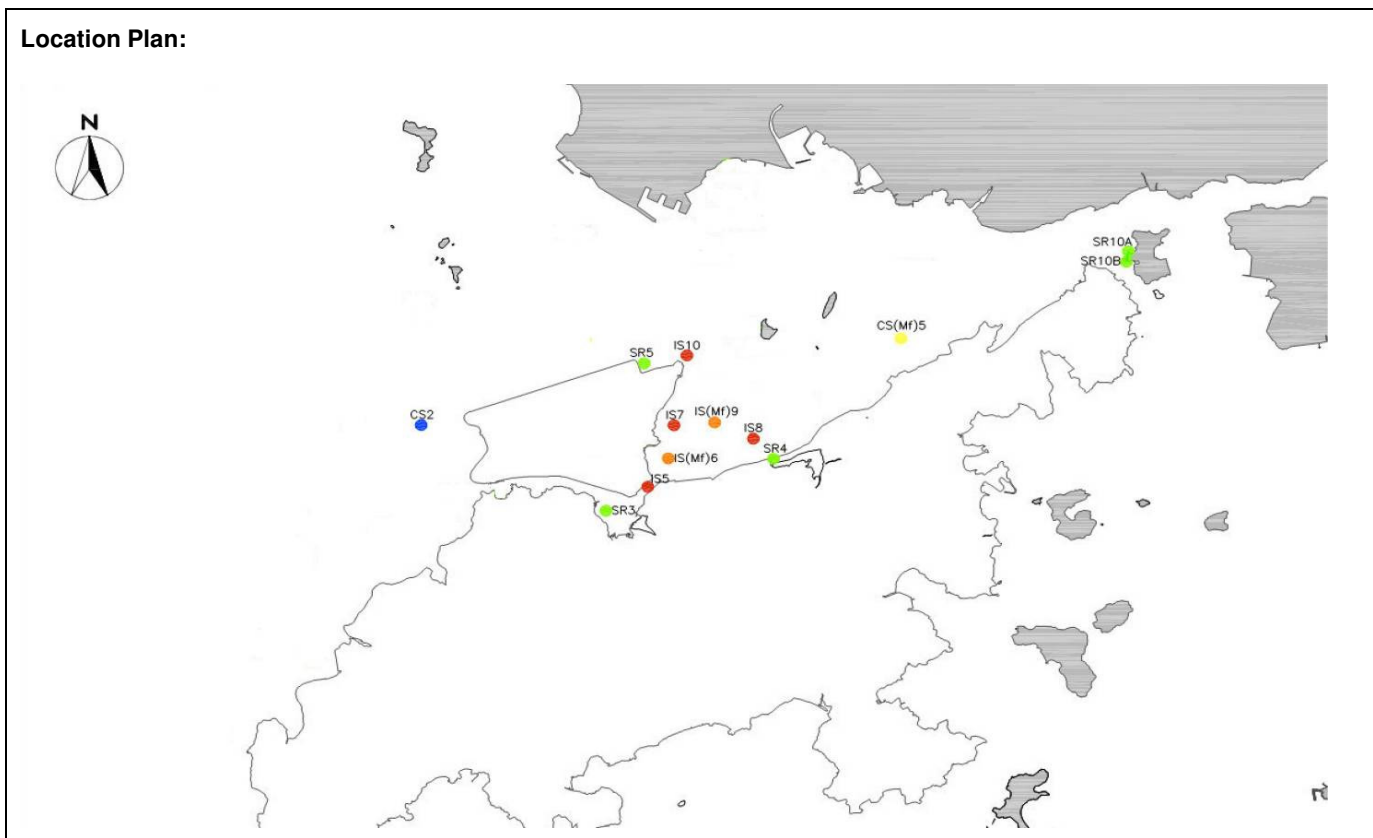
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 102

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 08 February 2013 and the test report was issued on 20 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 7.15 x 120% = 8.6 mg/L for mid ebb) AND CS(Mf)5: 4.75 x 120% = 5.7 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 7.15 x 130% = 9.3 mg/L for mid ebb) AND CS(Mf)5: 4.75 x 130% = 6.2 mg/L for mid flood)	7.4	<u>7.9</u>
SS	IS(Mf)6	DA			<u>15.5</u>	<u>9.5</u>
SS	IS7	DA			<u>10.8</u>	<u>10.2</u>
SS	IS8	DA			5.9	<u>7.2</u>
SS	IS(Mf)9	DA			6.6	<u>6.0</u>
SS	IS10	DA			6.9	<u>8.1</u>
SS	SR3	DA			6.7	<u>7.3</u>
SS	SR5	DA			<u>10.0</u>	<u>14.6</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 8 February 2013, LL exceedances at station IS(Mf)6, IS7 and SR5 were recorded for the mid-ebb tide. An AL exceedance for station IS(Mf)9 and exceedances for LL at stations IS5, IS(Mf)6, IS7, IS8, IS10, SR3 and SR5 were recorded for mid-flood tide.

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

1. The cleaning of stone platform activities were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR5	6.7	to	16.5	6.5	to	31.2

The measured values at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

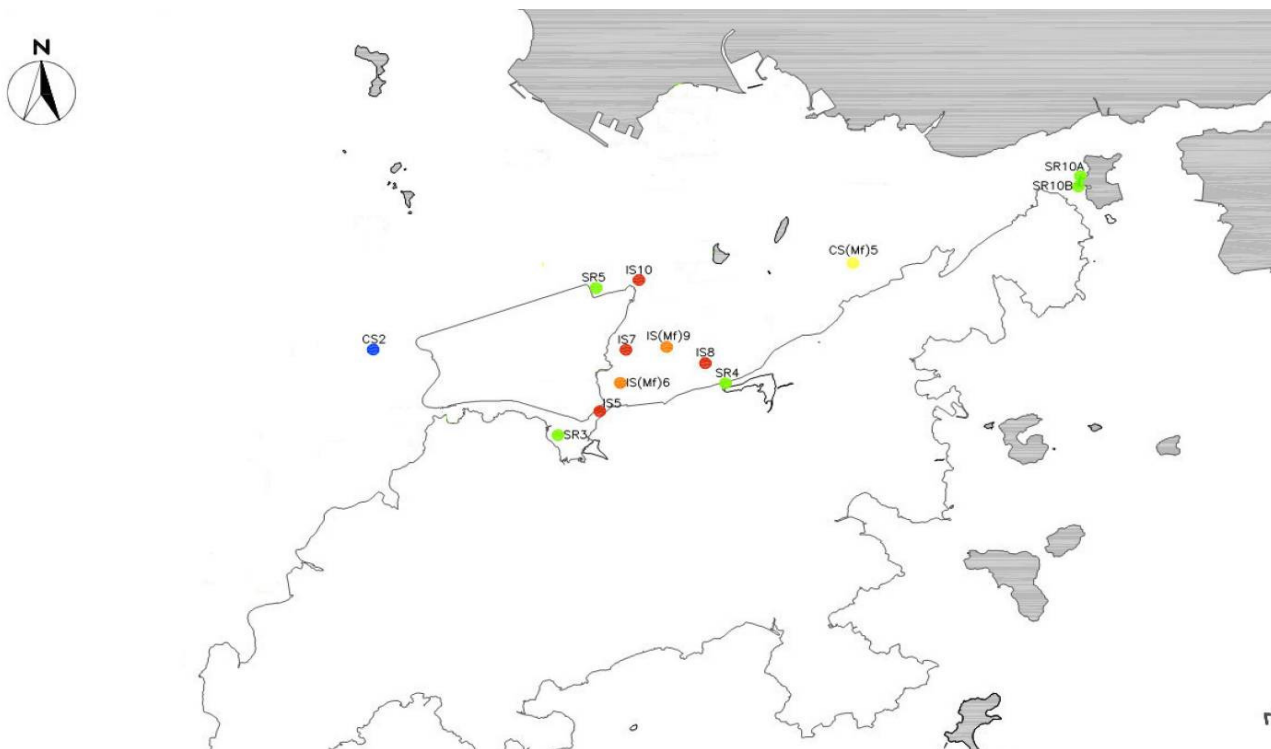
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 103

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 11 February 2013 and the test report was issued on 20 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $5.98 \times 120\% = 7.2$ mg/L for mid ebb) AND CS(Mf)5: $5.48 \times 120\% = 6.6$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $5.98 \times 130\% = 7.8$ mg/L for mid ebb) AND CS(Mf)5: $5.48 \times 130\% = 7.1$ mg/L for mid flood)	6.7	6.8
SS	SR5	DA			<u>8.0</u>	6.2
SS	SR10B	DA			4.8	7.1

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 11 February 2013, a LL exceedance at station SR5 was recorded for the mid-ebb tide. AL exceedances for stations IS7 and SR10B were recorded for mid-flood tide.

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

1. No marine activities were in operation during the sampling date.
2. The ranges of suspended solid at IS7, SR5 and SR10B 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
SR5	6.7	to	16.5	6.5	to	31.2
SR10B	3.1	to	30.8	5.7	to	26.7

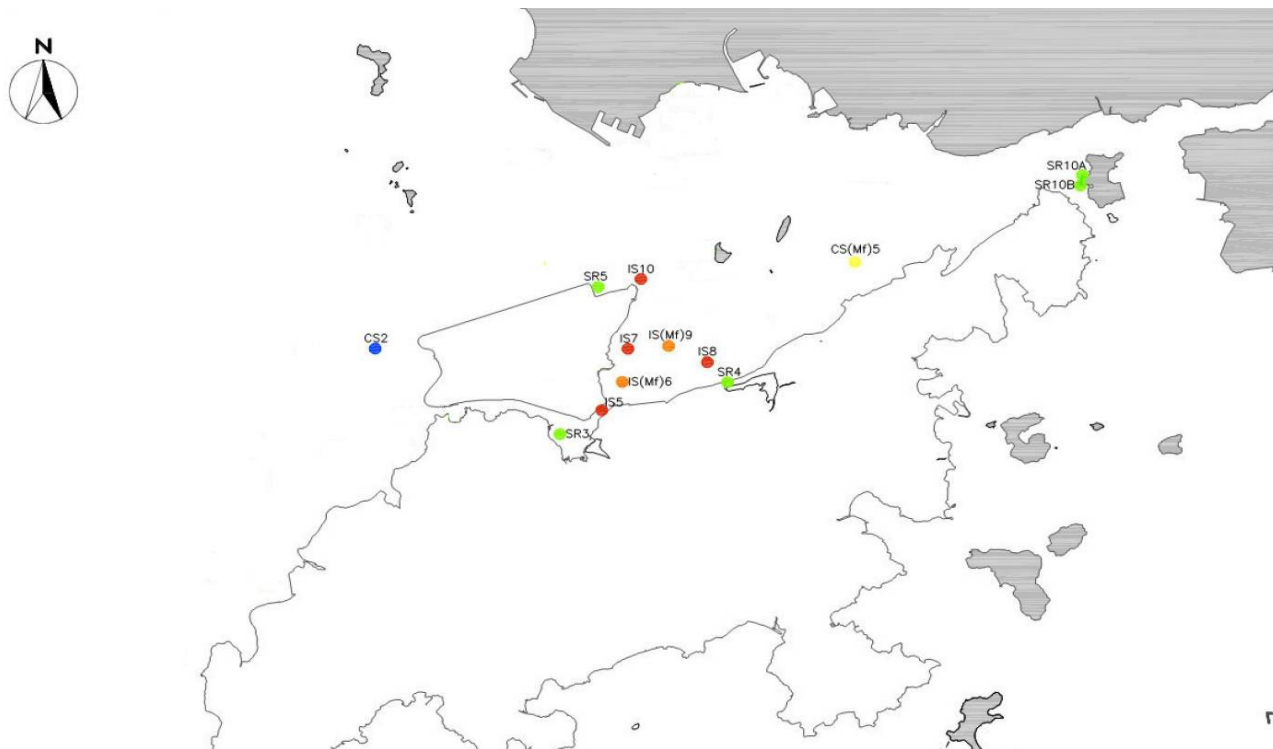
The measured values at IS7, SR5 and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

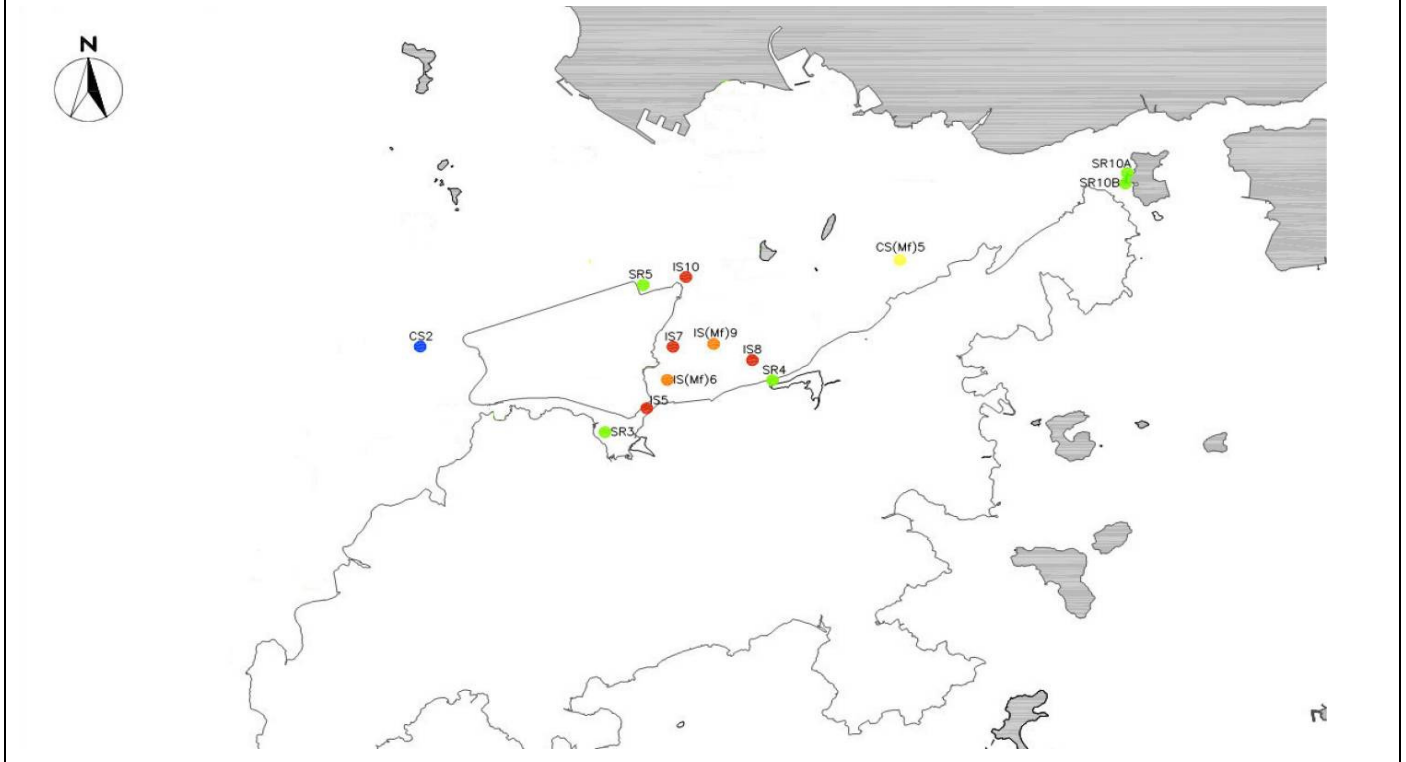
Date : 1 March 2013

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.: 104
Date of Notification: 1 March 2013						
Works Inspected: Data collected from water sampling works on 20 February 2013 and the results were issued on 21 February 2013						
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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS(Mf)6	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:3.03 x 120% = 3.6 for mid ebb AND CS(Mf)5: 2.13 x 120% = 2.6 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:3.03 x 130% = 3.9 for mid ebb AND CS(Mf)5: 2.13 x 130% = 2.8 for mid flood)	2.2	2.8
TURB	IS7	DA			<u>5.2</u>	<u>3.3</u>
TURB	IS8	DA			2.7	<u>4.1</u>
TURB	IS(Mf)9	DA			2.6	<u>3.5</u>
TURB	IS10	DA			2.2	2.8
TURB	SR4	DA			3.6	<u>3.2</u>
TURB	SR5	DA			2.2	<u>3.4</u>
Notes: DA means depth average. <i>Bold Italic</i> means AL exceedances. <i>Bold Italic with underline</i> means LL exceedances.						
Possible reason for Action or Limit Level Non-compliance:						
On 20 February 2013, a LL exceedance at station IS7 was recorded during mid-ebb tide. Exceedances of AL at stations IS(Mf)6 and IS10 and LL exceedances at stations IS7, IS8, IS(Mf)9, SR4 and SR5 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 reason:						
1. The sand filling works were carried out at stone platform						
2. The range of turbidity at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR4 and SR5 during the baseline monitoring is shown as below:						
Station		Range of Turbidity(NTU) Mid-Ebb Tide			Range of Turbidity(NTU) Mid-Flood Tide	
IS(Mf)6		3.3 to 21.7			5.3 to 20.9	
IS7		3.4 to 20			5 to 19.4	
IS8		4 to 12.2			4.5 to 24.5	
IS(Mf)9		2.7 to 17			3.4 to 22.6	
IS10		6.7 to 14.7			8.4 to 20.8	
SR4		5.2 to 18.9			5 to 20.6	
SR5		5.2 to 12.4			7.1 to 30.9	
The measured value at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR4 and SR5 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.						
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.						
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.						
As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.						

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 105

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 13 February 2013 and the test report was issued on 21 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 5.12 x 120% = 6.1 mg/L for mid ebb) AND CS(Mf)5: 2.62 x 120% = 3.1 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 5.12 x 130% = 6.7 mg/L for mid ebb) AND CS(Mf)5: 2.62 x 130% = 3.4 mg/L for mid flood)	3.4	<i>3.4</i>
SS	IS7	DA			3.5	<i><u>3.6</u></i>
SS	IS8	DA			2.3	<i><u>3.8</u></i>
SS	IS(Mf)9	DA			3.5	<i>3.4</i>
SS	IS10	DA			4.4	<i><u>6.4</u></i>
SS	SR3	DA			3.4	<i><u>5.4</u></i>
SS	SR4	DA			3.4	<i><u>4.3</u></i>
SS	SR5	DA			4.0	<i><u>4.3</u></i>
SS	SR10A	DA			2.4	<i><u>3.5</u></i>
SS	SR10B	DA			2.7	<i><u>3.5</u></i>

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 13 February 2013, AL exceedances for stations IS5 and IS(Mf)9 and LL exceedances at stations IS7, IS8, IS10, SR3, SR4, SR5, SR10A and SR10B were recorded for mid-flood tide.

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

1. No marine activities were in operation during the sampling date.
2. The ranges of suspended solid at IS5, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5, SR10A and SR10B 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR4	5.3	to	20	5.6	to	24.5
SR5	6.7	to	16.5	6.5	to	31.2
SR10A	3.6	to	17	4.8	to	19.2
SR10B	3.1	to	30.8	5.7	to	26.7

The measured values at IS5, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5, SR10A and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

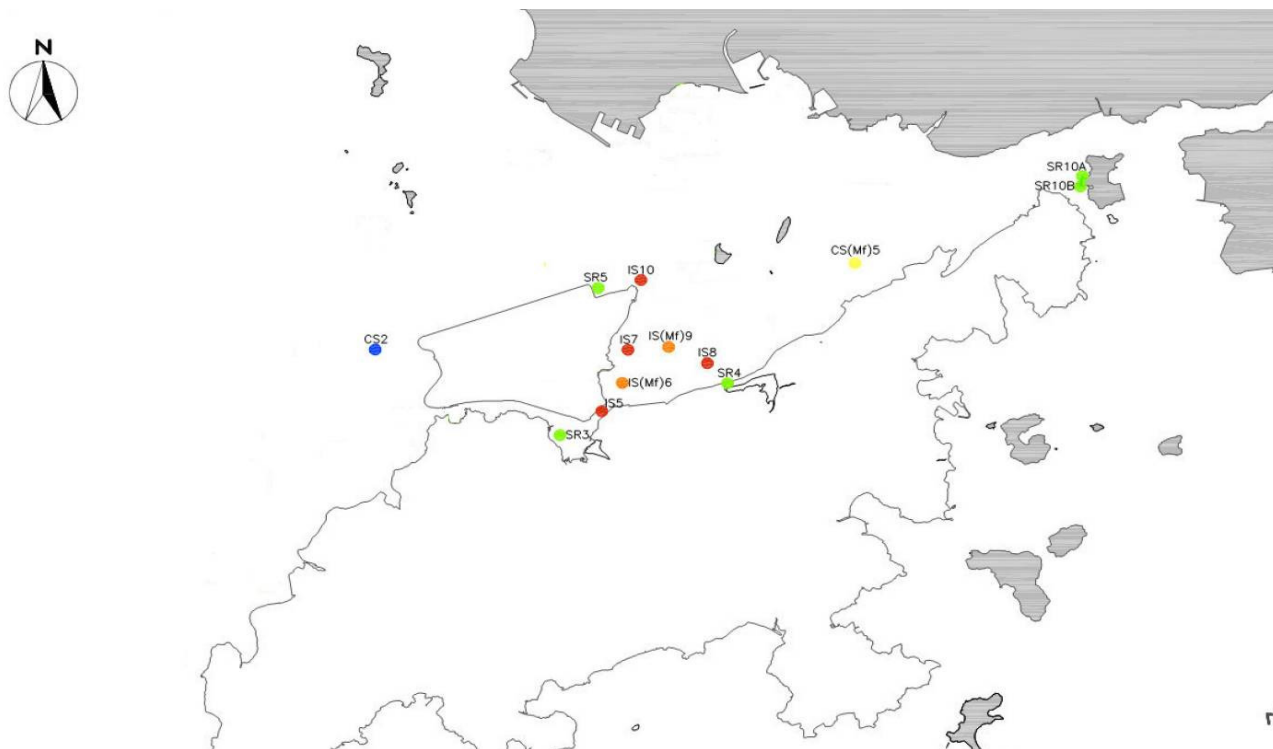
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 1 March 2013

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.: 106

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 15 February 2013 and the test report was issued on 22 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $5.72 \times 120\% = 6.9$ mg/L for mid ebb) AND CS(Mf)5: $3.95 \times 120\% = 4.7$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $5.72 \times 130\% = 7.4$ mg/L for mid ebb) AND CS(Mf)5: $3.95 \times 130\% = 5.1$ mg/L for mid flood)	4.0	<u>6.6</u>
SS	IS8	DA			6.0	<u>5.4</u>
SS	IS(Mf)9	DA			5.7	<u>6.8</u>
SS	IS10	DA			5.3	<u>5.1</u>
SS	SR3	DA			5.3	<u>5.4</u>
SS	SR4	DA			<u>7.6</u>	<u>6.4</u>
SS	SR5	DA			7.0	<u>23.6</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 15 February 2013, an AL exceedance for station SR5 and a LL exceedance at station, SR4 was recorded for mid-ebb tide. An AL exceedance for station IS10 and LL exceedances for stations IS7, IS8, IS(Mf)9, SR3, SR4 and SR5 were recorded for mid-flood tide.

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

1. The cleaning of stone platform activities were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at IS7, IS8, IS(Mf)9, IS10, SR3, SR4 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	
IS7	6.1	to 21	7.8	to 34
IS8	5.5	to 25.5	5.8	to 31.3
IS(Mf)9	5.5	to 20.1	7.3	to 26
IS10	6.1	to 20.2	7.2	to 16
SR3	6.7	to 31	7.6	to 28
SR4	5.3	to 20	5.6	to 24.5
SR5	6.7	to 16.5	6.5	to 31.2

The measured values at IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

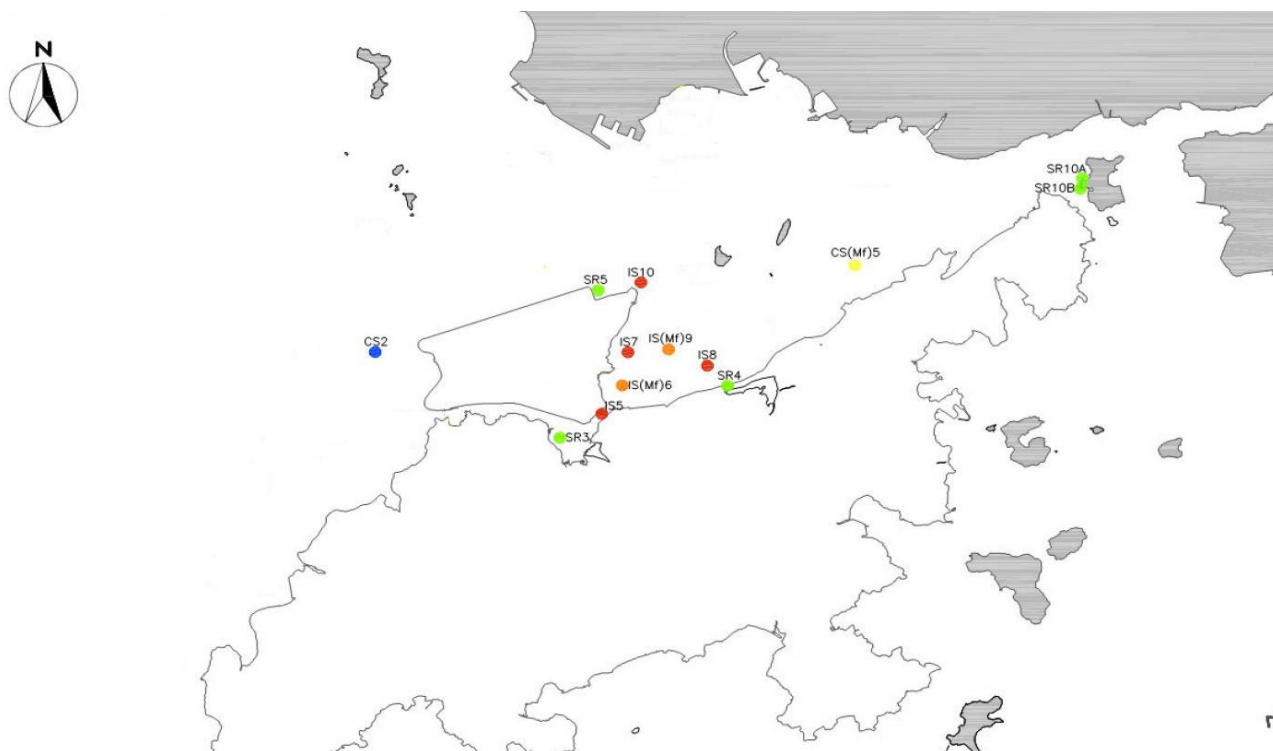
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 107

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 18 February 2013 and the test report was issued on 25 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.35 \times 120\% = 2.8$ mg/L for mid ebb) AND CS(Mf)5: $2.53 \times 120\% = 3.0$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.35 \times 130\% = 3.1$ mg/L for mid ebb) AND CS(Mf)5: $2.53 \times 130\% = 3.3$ mg/L for mid flood)	2.8	<u>4.3</u>
SS	IS(Mf)6	DA			<u>3.5</u>	3.1
SS	IS7	DA			<u>3.5</u>	2.5
SS	IS8	DA			<u>3.4</u>	3.2
SS	IS(Mf)9	DA			<u>3.9</u>	3.1
SS	IS10	DA			2.2	<u>4.3</u>
SS	SR3	DA			<u>3.5</u>	2.4

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 18 February 2013, LL exceedances at stations IS(Mf)6, IS7, IS8, IS(Mf)9 and SR3 were recorded for mid-ebb tide. AL exceedances for stations IS(Mf)6, IS8, IS(Mf)9 and LL exceedances for stations IS5 and IS10 were recorded for mid-flood tide.

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

1. The sand filling works were carried out at stone platform.
2. The ranges of suspended solid at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, 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
IS(Mf)6	7.1	to	19	8.5	to	35
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28

The measured values at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10 and SR3 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

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

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 108

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 20 February 2013 and the test report was issued on 27 February 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.5 \times 120\% = 3.0$ mg/L for mid ebb) AND CS(Mf)5: $1.43 \times 120\% = 1.7$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.5 \times 130\% = 3.3$ mg/L for mid ebb) AND CS(Mf)5: $1.43 \times 130\% = 1.9$ mg/L for mid flood)	2.9	<u>2.9</u>
SS	IS(Mf)6	DA			<u>3.8</u>	<u>3.5</u>
SS	IS7	DA			<u>3.8</u>	<u>4.7</u>
SS	IS8	DA			<u>5.1</u>	<u>3.5</u>
SS	IS(Mf)9	DA			<u>3.9</u>	<u>5.1</u>
SS	IS10	DA			3.0	<u>2.9</u>
SS	SR3	DA			3.3	<u>2.6</u>
SS	SR4	DA			3.2	<u>3.3</u>
SS	SR5	DA			2.4	<u>3.1</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 20 February 2013, AL exceedances at stations SR3, SR4 and LL exceedances at stations, IS(Mf)6, IS7, IS8, IS(Mf)9 were recorded for mid-ebb tide. LL exceedances for stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 and SR5 were recorded for mid-flood tide.

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

1. The sand filling works were carried out at stone platform
2. The ranges of suspended solid at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR4	5.3	to	20	5.6	to	24.5
SR5	6.7	to	16.5	6.5	to	31.2

The measured values at IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

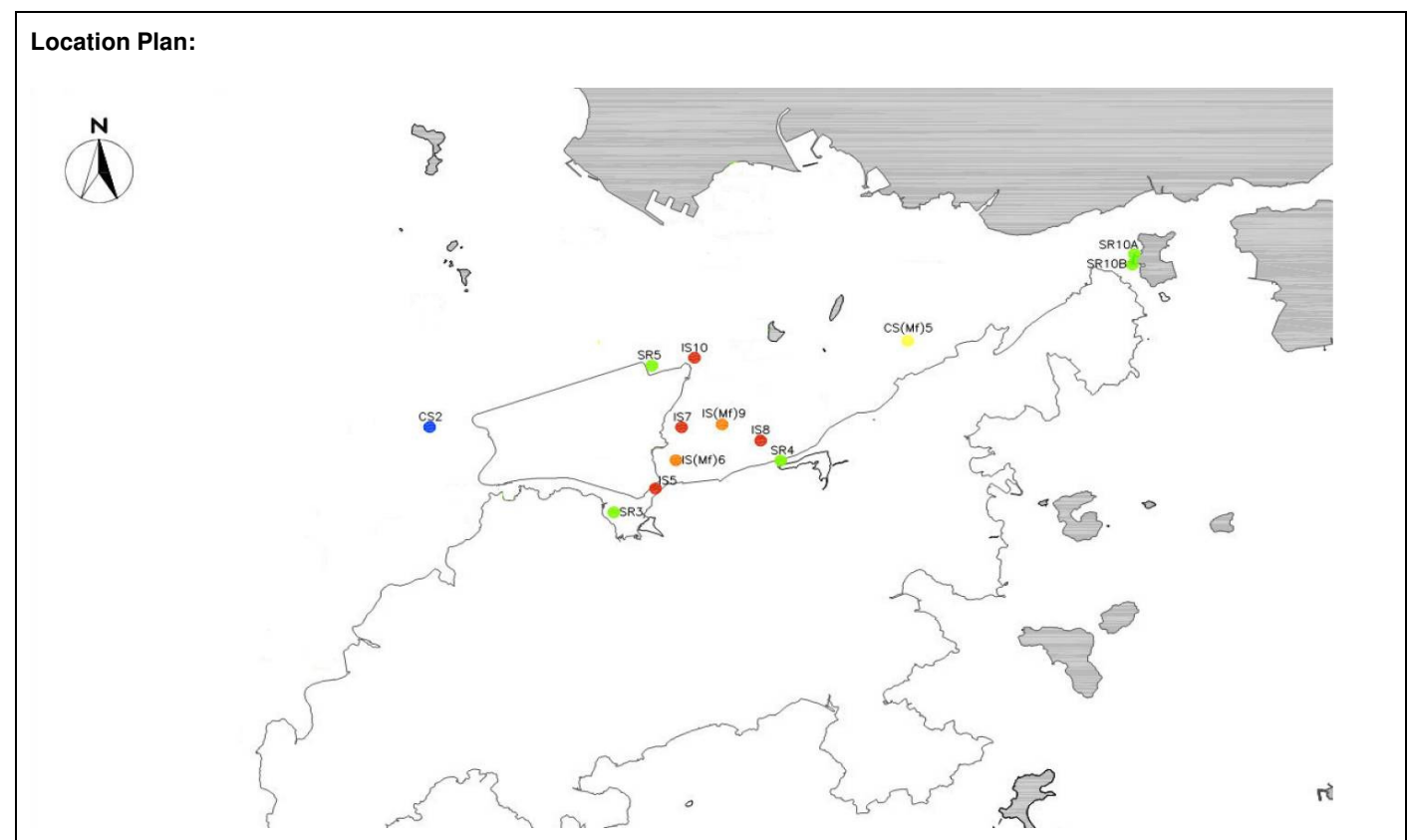
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

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

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


Actions taken/ to be taken:

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



Reviewed by
:
Claudine Lee

Title
:
ET Leader



Date
:
1 March 2013

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

Date of Notification: 1 March 2013

Works Inspected: Data collected from water sampling works on 22 February 2013 and the results were issued on 25 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS(Mf)6	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.60 x 120% = 3.1 for mid ebb AND CS(Mf)5: 1.85x 120% = 2.2 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:2.60 x 130% = 3.4 for mid ebb AND CS(Mf)5: 1.85 x 130% = 2.4 for mid flood)	<u>5.4</u>	<u>3.3</u>
TURB	IS7	DA			3.0	<u>3.3</u>
TURB	IS(Mf)9	DA			2.5	<u>4.7</u>
TURB	IS10	DA			3.3	1.6
TURB	SR3	DA			1.9	2.3
TURB	SR4	DA			2.0	<u>2.5</u>
TURB	SR5	DA			<u>3.9</u>	1.8

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 22 February 2013, an AL exceedance at station IS10 and LL exceedances at stations IS(Mf)6 and SR5 were recorded during mid-ebb tide. An AL exceedance at station SR3 and LL exceedances at stations IS(Mf)6, IS7, IS(Mf)9 and SR4 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 reason:

1. The sand filling works were carried out at stone platform
2. The range of turbidity at stations IS(Mf)6, IS7, IS(Mf)9, IS10, SR3, SR4 and SR5 during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS(Mf)9	2.7	to 17	3.4	to 22.6
IS10	6.7	to 14.7	8.4	to 20.8
SR3	4.6	to 65.7	7.7	to 19.7
SR4	5.2	to 18.9	5	to 20.6
SR5	5.2	to 12.4	7.1	to 30.9

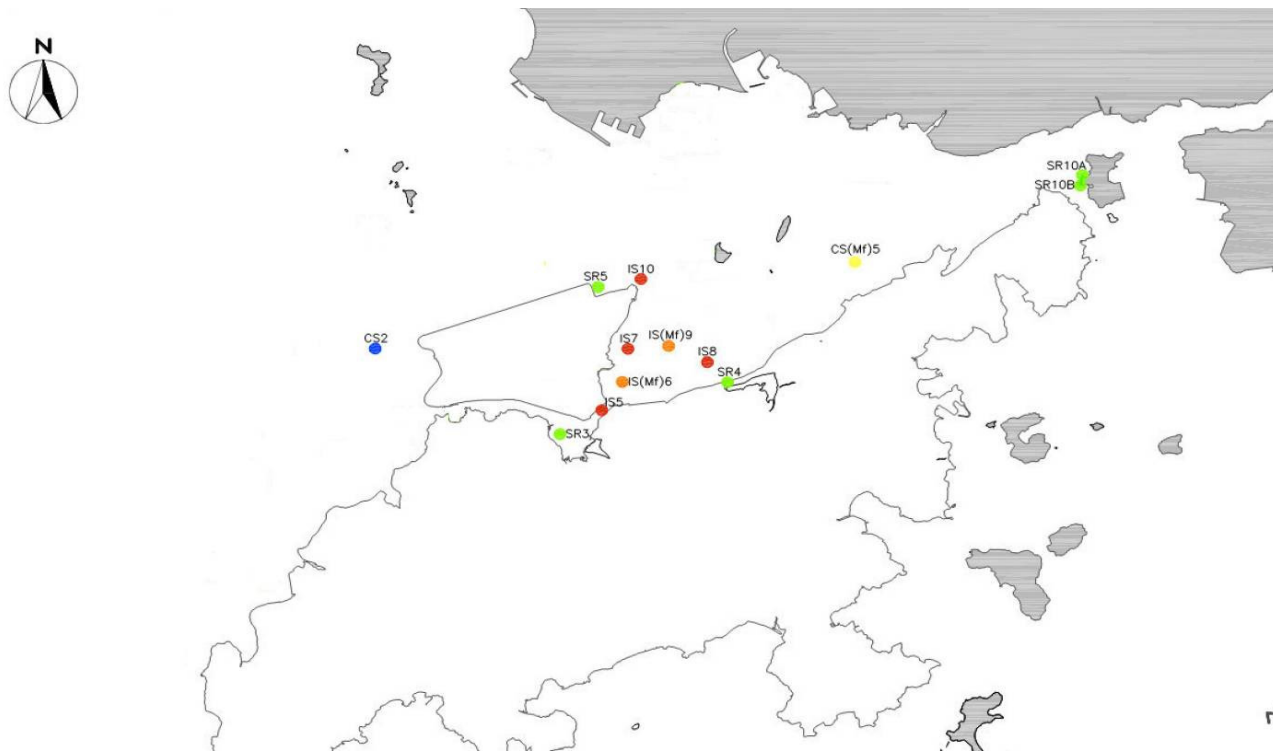
The measured value at stations IS(Mf)6, IS7, IS(Mf)9, IS10, SR3, SR4 and SR5 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:

Reviewed by : Claudine Lee

Title : ET Leader

Date : 1 March 2013

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.: 110

Date of Notification: 5 March 2013

Works Inspected: Data collected from water sampling works on 25 February 2013 and the results were issued on 28 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS(Mf)6	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:1.98 x 120% = 2.4 for mid ebb AND CS(Mf)5: 2.40 x 120% = 2.9 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:1.98 x 130% = 2.6 for mid ebb AND CS(Mf)5: 2.40 x 130% = 3.1 for mid flood)	<u>5.3</u>	<u>3.8</u>
TURB	IS7	DA			<u>5.2</u>	<u>3.8</u>
TURB	IS(Mf)9	DA			1.6	3.1
TURB	IS10	DA			<u>3.1</u>	2.6
TURB	SR4	DA			1.9	<u>4.2</u>
TURB	SR5	DA			<u>3.7</u>	1.7

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 25 February 2013, LL exceedances at stations IS(Mf)6, IS7, IS10 and SR5 were recorded during mid-ebb tide. An AL exceedance at station IS(Mf)9 and LL exceedances at stations IS(Mf)6, IS7 and SR4 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 reason:

1. The sand filling works were carried out within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS(Mf)6, IS7, IS(Mf)9, IS10, SR4 and SR5 during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS(Mf)6	3.3	to 21.7	5.3	to 20.9
IS7	3.4	to 20	5	to 19.4
IS(Mf)9	2.7	to 17	3.4	to 22.6
IS10	6.7	to 14.7	8.4	to 20.8
SR4	5.2	to 18.9	5	to 20.6
SR5	5.2	to 12.4	7.1	to 30.9

The measured value at stations IS(Mf)6, IS7, IS(Mf)9, IS10, SR4 and SR5 were within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

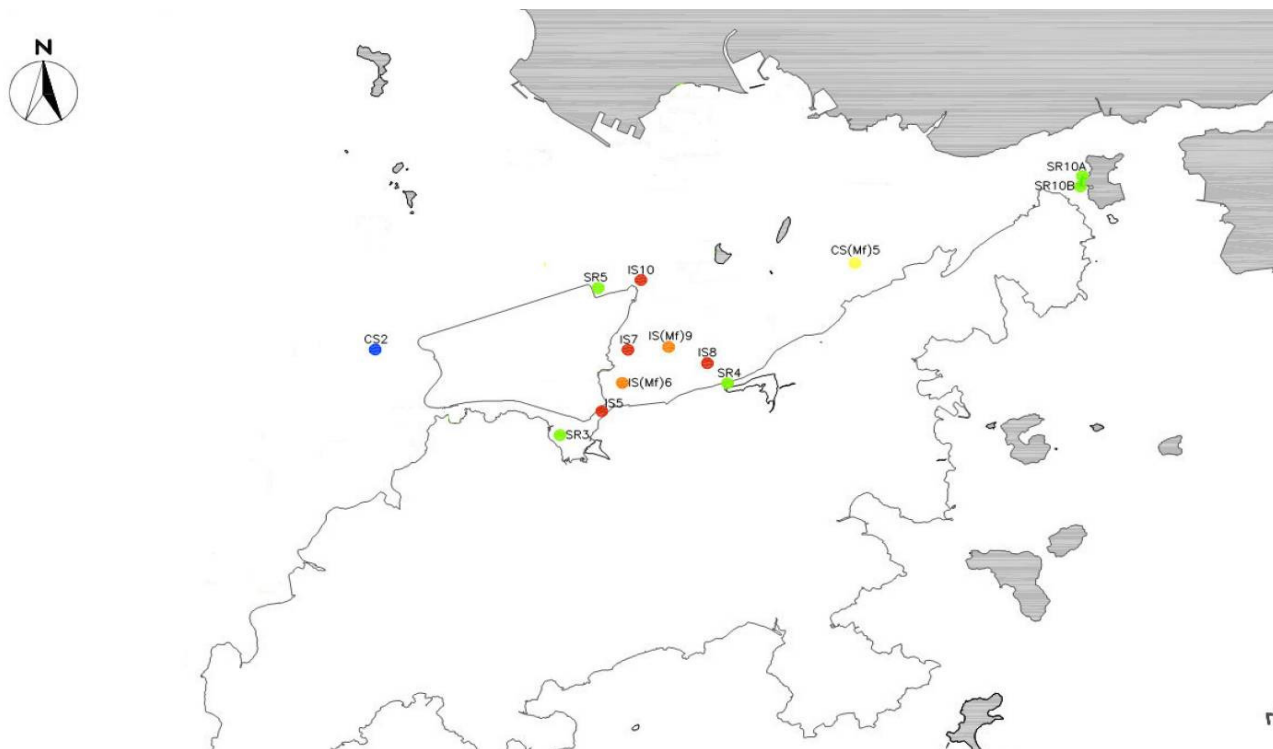
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 5 March 2013

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

Date of Notification: 5 March 2013

Works Inspected: Data collected from water sampling works on 27 February 2013 and the results were issued on 28 February 2013

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 (NTU)	LL (NTU)	MEASURED AT MID-EBB TIDE (NTU)	MEASURED AT MID-FLOOD TIDE (NTU)
TURB	IS(Mf)6	DA	27.5 or 120% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:4.67 x 120% = 5.6 for mid ebb AND CS(Mf)5: 7.25 x 120% = 8.7 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:4.67 x 130% = 6.1 for mid ebb AND CS(Mf)5: 7.25 x 130% = 9.4 for mid flood)	<u>6.4</u>	7.2

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 27 February 2013, a LL exceedance at station IS(Mf)6 was recorded during mid-ebb tide.

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

1. Installation of stone column was carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at station IS(Mf)6 during the baseline monitoring is shown as below:

Station	Range of Turbidity(NTU) Mid-Ebb Tide		Range of Turbidity(NTU) Mid-Flood Tide	
IS(Mf)6	3.3	to 21.7	5.3	to 20.9

The measured value at station IS(Mf)6 was within the range of turbidity for mid-ebb tide and mid-flood tide during baseline monitoring.

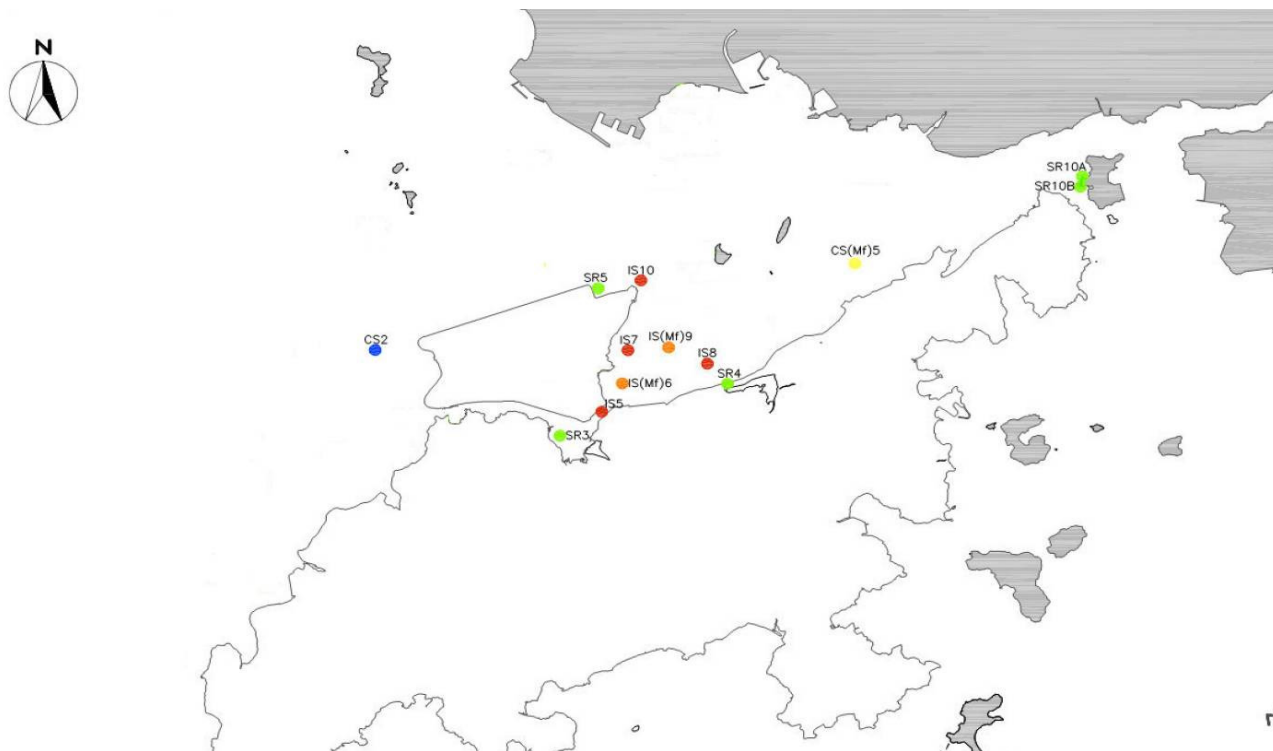
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the turbidity levels are considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

As the turbidity levels recorded beyond the water quality criteria were not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 5 March 2013

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.: 112

Date of Notification: 5 March 2013

Works Inspected: Data collected from water sampling works on 22 February 2013 and the test report was issued on 2 March 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.23x 120% = 5.1 mg/L for mid ebb) AND CS(Mf)5: 1.5 x 120% = 1.8 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.23 x 130% = 5.5 mg/L for mid ebb) AND CS(Mf)5: 1.5 x 130% = 2.0 mg/L for mid flood)	5.5	<u>3.2</u>
SS	IS(Mf)6	DA			<u>6.8</u>	<u>3.7</u>
SS	IS7	DA			5.3	<u>4.2</u>
SS	IS8	DA			3.4	<u>3.6</u>
SS	IS(Mf)9	DA			2.3	<u>5.1</u>
SS	IS10	DA			4.4	<u>2.7</u>
SS	SR3	DA			3.2	<u>3.4</u>
SS	SR4	DA			2.3	<u>3.6</u>
SS	SR5	DA			4.4	<u>3.6</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 22 February 2013, AL exceedances at stations IS5 and IS7 and an LL exceedance at station IS(Mf)6 were recorded for mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, and SR5 were recorded for mid-flood tide.

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

1. The sand filling works were carried out at stone platform.
2. The ranges of suspended solid at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, 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
IS7	6.1	to 21	7.8	to 34
IS8	5.5	to 25.5	5.8	to 31.3
IS(Mf)9	5.5	to 20.1	7.3	to 26
IS10	6.1	to 20.2	7.2	to 16
SR3	6.7	to 31	7.6	to 28
SR4	5.3	to 20	5.6	to 24.5
SR5	6.7	to 16.5	6.5	to 31.2

The measured values at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

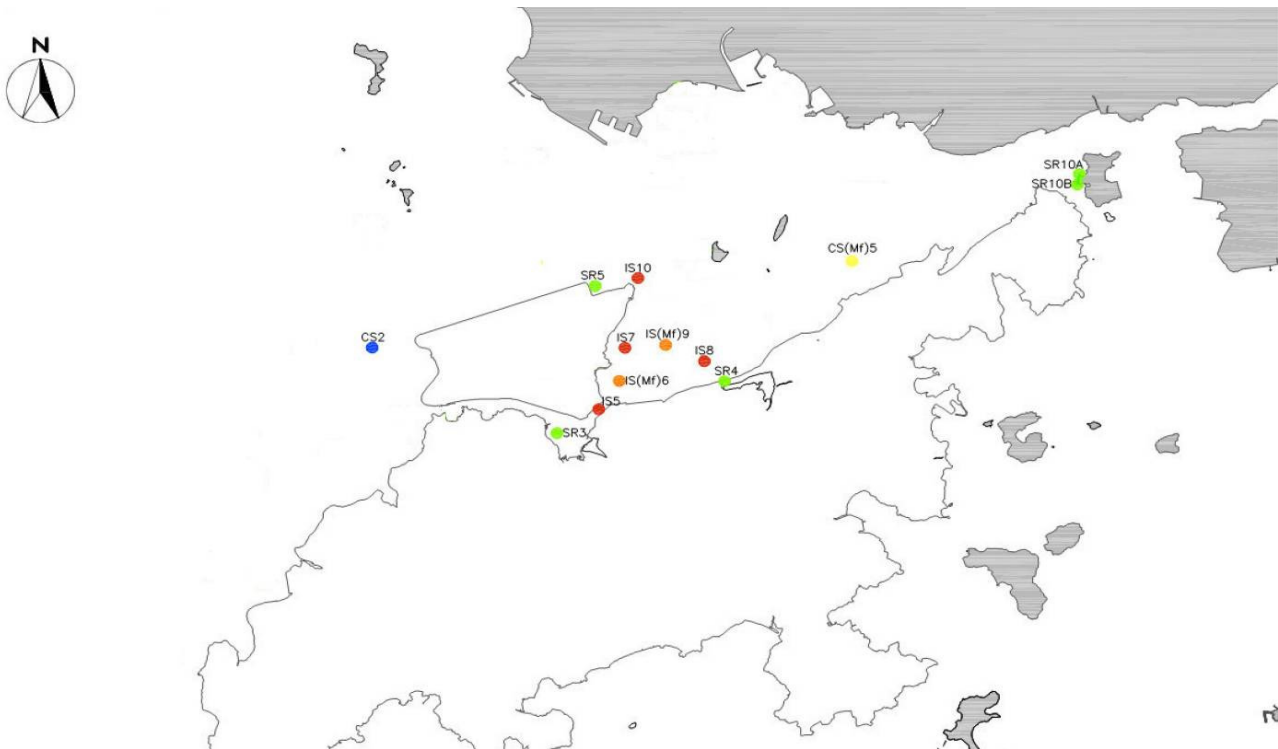
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader



Date : 5 March 2013

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.: 113

Date of Notification: 5 March 2013

Works Inspected: Data collected from water sampling works on 25 February 2013 and the test report was issued on 5 March 2013.

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 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.87 \times 120\% = 3.4$ mg/L for mid ebb) AND CS(Mf)5: $2.72 \times 120\% = 3.3$ mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: $2.87 \times 130\% = 3.7$ mg/L for mid ebb) AND CS(Mf)5: $2.72 \times 130\% = 3.5$ mg/L for mid flood)	3.4	<u>4.6</u>
SS	IS(Mf)6	DA			<u>7.7</u>	<u>5.1</u>
SS	IS7	DA			<u>7.4</u>	<u>6.0</u>
SS	IS8	DA			<u>3.9</u>	3.1
SS	IS(Mf)9	DA			3.2	<u>5.1</u>
SS	IS10	DA			<u>3.8</u>	2.5
SS	SR3	DA			<u>4.4</u>	<u>5.4</u>
SS	SR4	DA			<u>4.0</u>	<u>3.6</u>
SS	SR5	DA			<u>4.2</u>	3.5
SS	SR10B	DA			3.5	3.1

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 25 February 2013, an AL exceedance at station SR10B and LL exceedances at stations IS(Mf)6, IS7, IS8, IS10, SR3, SR4 and SR5 were recorded for mid-ebb tide. An AL exceedance at station SR5 and LL exceedances at stations IS5, IS(Mf)6, IS7, IS(Mf)9, SR3 and SR4 were recorded for mid-flood tide.

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

1. The sand filling works were carried out within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10B 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
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR4	5.3	to	20	5.6	to	24.5
SR5	6.7	to	16.5	6.5	to	31.2
SR10B	3.1	to	30.8	5.7	to	26.7

The measured values at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 SR5 and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

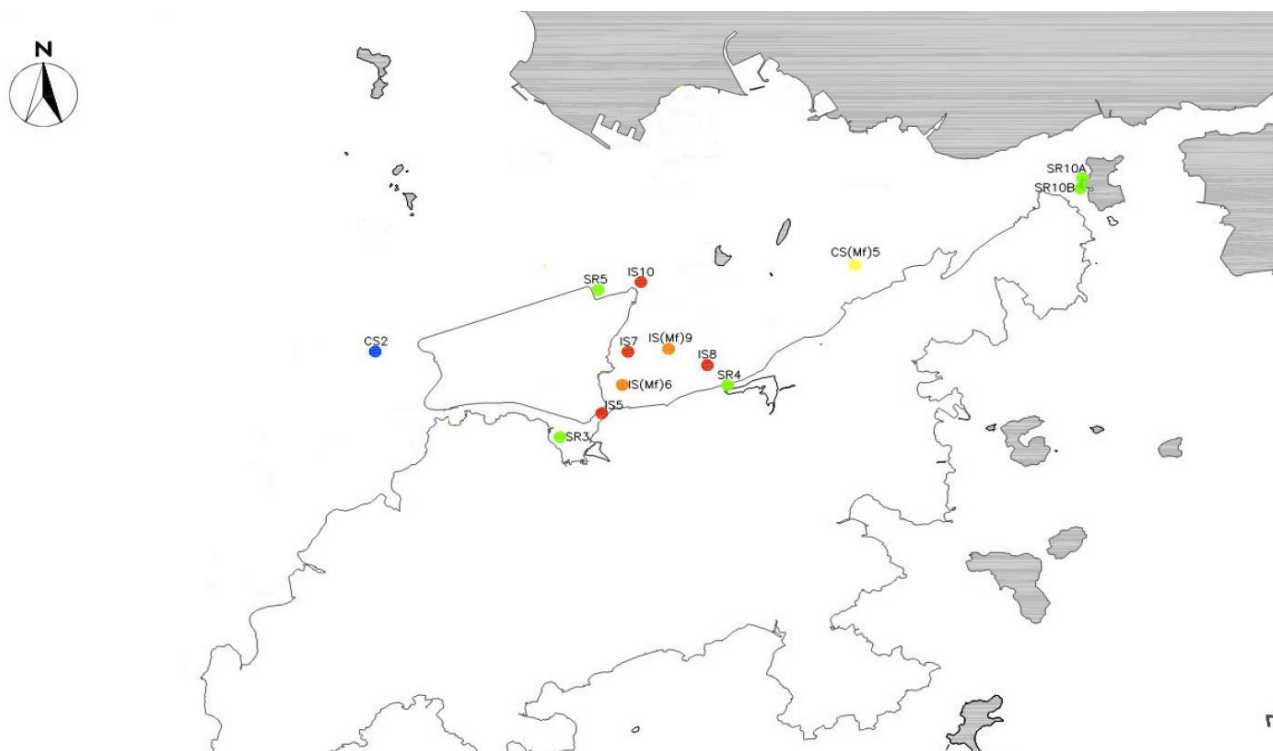
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 5 March 2013

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.: 114

Date of Notification: 7 March 2013

Works Inspected: Data collected from water sampling works on 27 February 2013 and the test report was issued on 6 March 2013.

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)6	DA	23.5 or 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.95 x 120% = 5.9 mg/L for mid ebb) AND CS(Mf)5: 2.90 x 120% = 3.5 mg/L for mid flood)	34.4 or 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.95 x 130% = 6.4 mg/L for mid ebb) AND CS(Mf)5: 2.90 x 130% = 3.8 mg/L for mid flood)	<u>9.0</u>	<u>5.7</u>
SS	IS7	DA			5.3	<u>5.6</u>
SS	IS8	DA			2.8	<u>5.1</u>
SS	IS(Mf)9	DA			3.9	<u>6.1</u>
SS	IS10	DA			4.2	<u>6.9</u>
SS	SR3	DA			3.9	3.8
SS	SR4	DA			2.5	<u>4.5</u>
SS	SR5	DA			3.1	<u>7.2</u>
SS	SR10A	DA			3.1	<u>5.4</u>
SS	SR10B	DA			2.9	<u>5.4</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 27 February 2013, a LL exceedance at station IS(Mf)6 was recorded for mid-ebb tide. An AL exceedance at station SR3 and LL exceedances at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR4, SR5, SR10A and SR10B were recorded for mid-flood tide.

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

1. Installation of stone column was carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5, SR10A and SR10B 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)6	7.1	to	19	8.5	to	35
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28
SR4	5.3	to	20	5.6	to	24.5
SR5	6.7	to	16.5	6.5	to	31.2
SR10A	3.6	to	17	4.8	to	19.2
SR10B	3.1	to	30.8	5.7	to	26.7

The measured values at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4 SR5 , SR10A and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

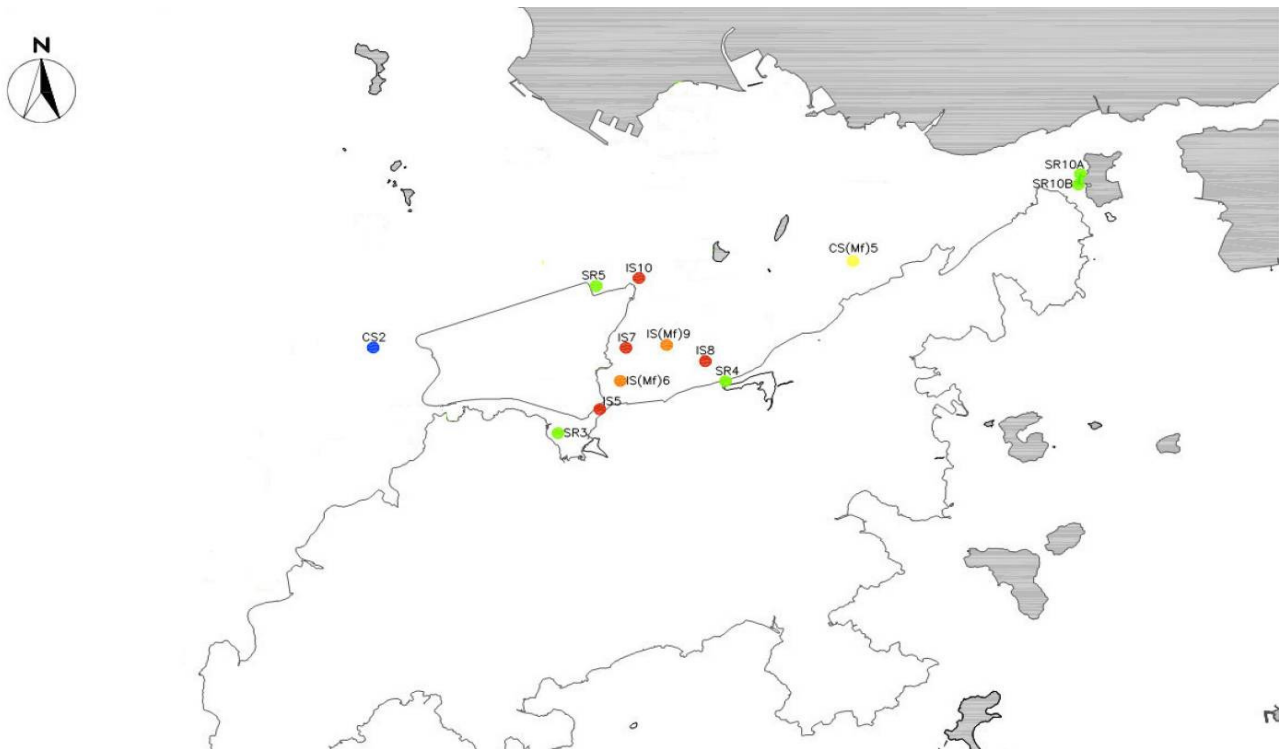
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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

Actions taken/ to be taken:

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

Location Plan:



Reviewed by : Claudine Lee

Title : ET Leader

Date : 7 March 2013

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