

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.: 115

Date of Notification: 13 March 2013

Works Inspected: Data collected from water sampling works on 1 March 2013 and the results were issued on 4 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 (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. CS2:4.35 x 120% = 5.2 for mid ebb AND CS(Mf)5: 2.75 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. CS2:4.35 x 130% = 5.7 for mid ebb AND CS(Mf)5: 2.75 x 130% = 3.6 for mid flood)	<u>6.1</u>	<u>4.6</u>
TURB	IS7	DA			3.0	<u>5.4</u>
TURB	IS8	DA			<u>6.1</u>	3.2
TURB	IS(Mf)9	DA			1.6	<u>3.7</u>
TURB	IS10	DA			4.1	<u>6.4</u>
TURB	SR3	DA			3.4	<u>3.7</u>
TURB	SR4	DA			1.2	<u>3.7</u>
TURB	SR5	DA			2.0	<u>10.7</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 1 March 2013, LL exceedances at stations IS(Mf)6 and IS8 were recorded during mid-ebb tide. LL exceedances at stations IS(Mf)6 , IS7, 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. Installation of stone column, rock/sand filling and rock transfer activities were carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations 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	
	Min	Max	Min	Max
IS(Mf)6	3.3	21.7	5.3	20.9
IS7	3.4	20	5	19.4
IS8	4	12.2	4.5	24.5
IS(Mf)9	2.7	17	3.4	22.6
IS10	6.7	14.7	8.4	20.8
SR3	4.6	65.7	7.7	19.7
SR4	5.2	18.9	5	20.6
SR5	5.2	12.4	7.1	30.9

The measured values at stations 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.

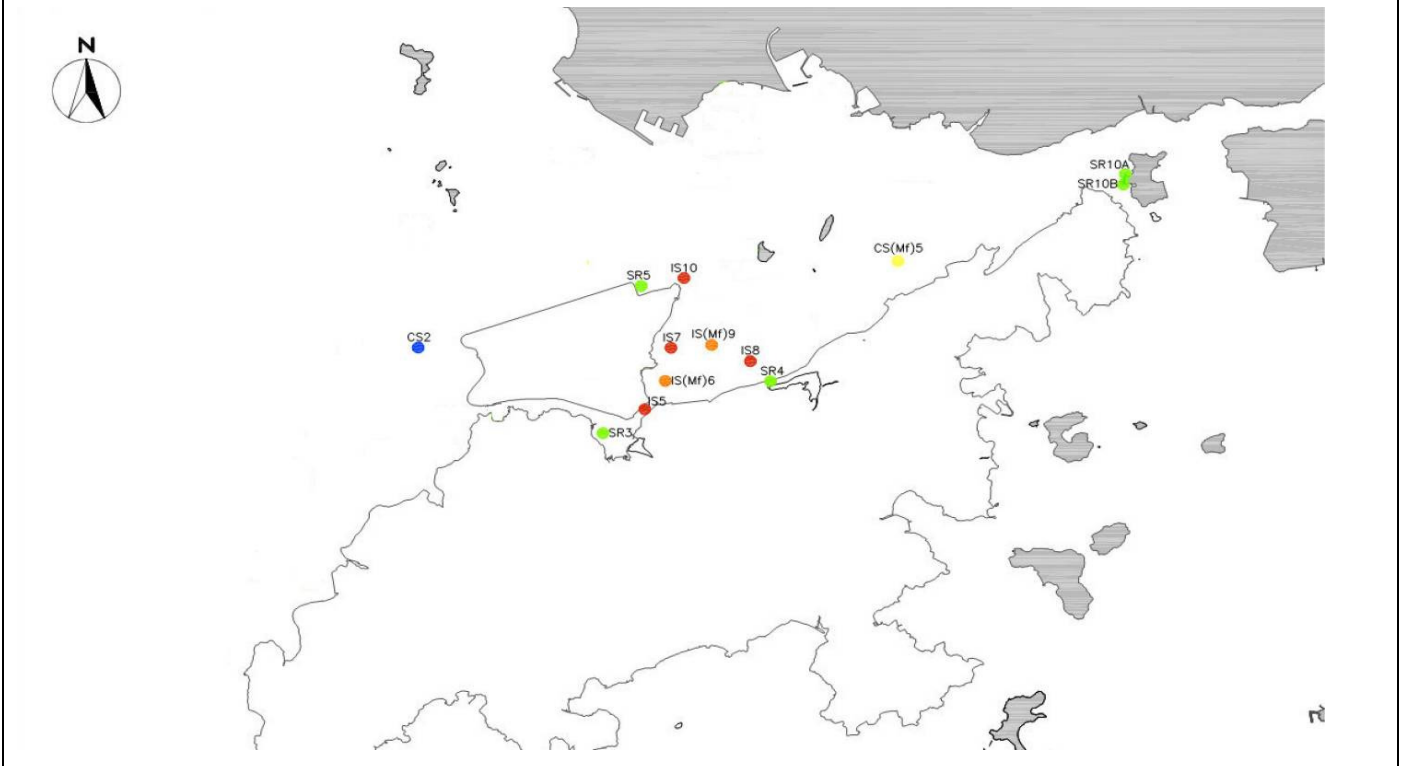
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 13 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.: 116

Date of Notification: 13 March 2013

Works Inspected: Data collected from water sampling works on 4 March 2013 and the results were issued on 7 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 (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: 3.37 x 120% = 4.0 for mid ebb AND CS(Mf)5: 1.35 x 120% = 1.6 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2:3.37 x 130% = 4.4 for mid ebb AND CS(Mf)5: 1.35x 130% = 1.8 for mid flood)	3.2	<u>3.4</u>
TURB	IS(Mf)6	DA			3.7	<u>4.2</u>
TURB	IS7	DA			4.2	<u>4.7</u>
TURB	IS8	DA			2.0	<u>2.0</u>
TURB	IS(Mf)9	DA			3.3	<u>3.5</u>
TURB	IS10	DA			3.3	<u>6.2</u>
TURB	SR3	DA			3.1	<u>4.5</u>
TURB	SR4	DA			2.5	<u>3.2</u>
TURB	SR5	DA			4.0	<u>13.4</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 March 2013, an AL exceedance at station IS7 was recorded during mid-ebb tide. 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. Installation of stone column 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 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
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 values 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.

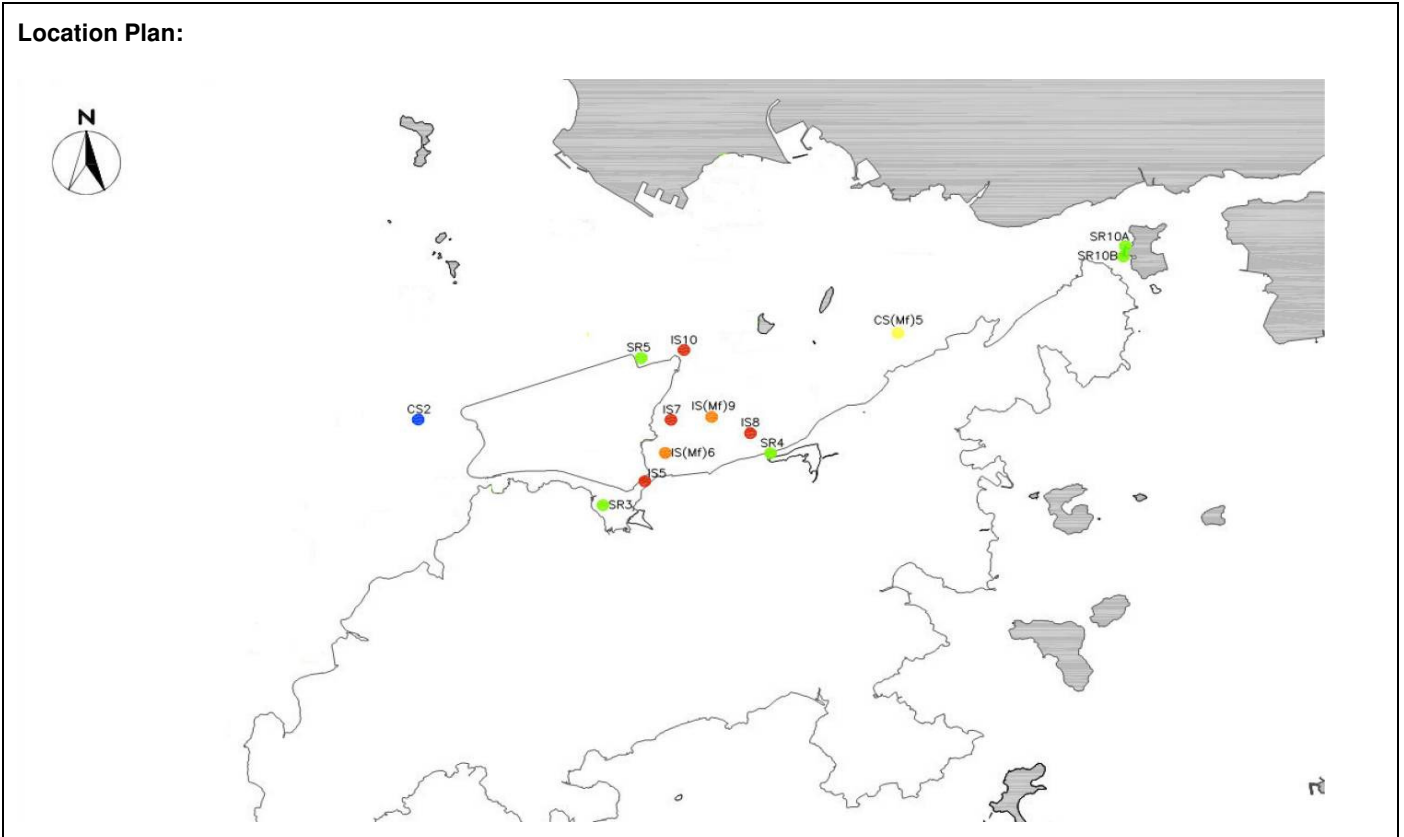
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 13 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.: 117

Date of Notification: 13 March 2013

Works Inspected: Data collected from water sampling works on 6 March 2013 and the results were issued on 7 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 (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: $3.2 \times 120\% = 3.8$ for mid ebb AND CS(Mf)5: $2.27 \times 120\% = 2.7$ for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: $3.2 \times 130\% = 4.2$ for mid ebb AND CS(Mf)5: $2.27 \times 130\% = 2.9$ for mid flood)	2.1	<u>3.6</u>
TURB	IS7	DA			2.2	<u>3.5</u>
TURB	IS10	DA			2.3	<u>5.6</u>
TURB	SR5	DA			2.3	<u>5.6</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 6 March 2013, LL exceedances at stations IS(Mf)6 , IS7, IS10, 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. Transferring fill material activity was carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS(Mf)6 , IS7, IS10 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
IS10	6.7	to 14.7	8.4	to 20.8
SR5	5.2	to 12.4	7.1	to 30.9

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

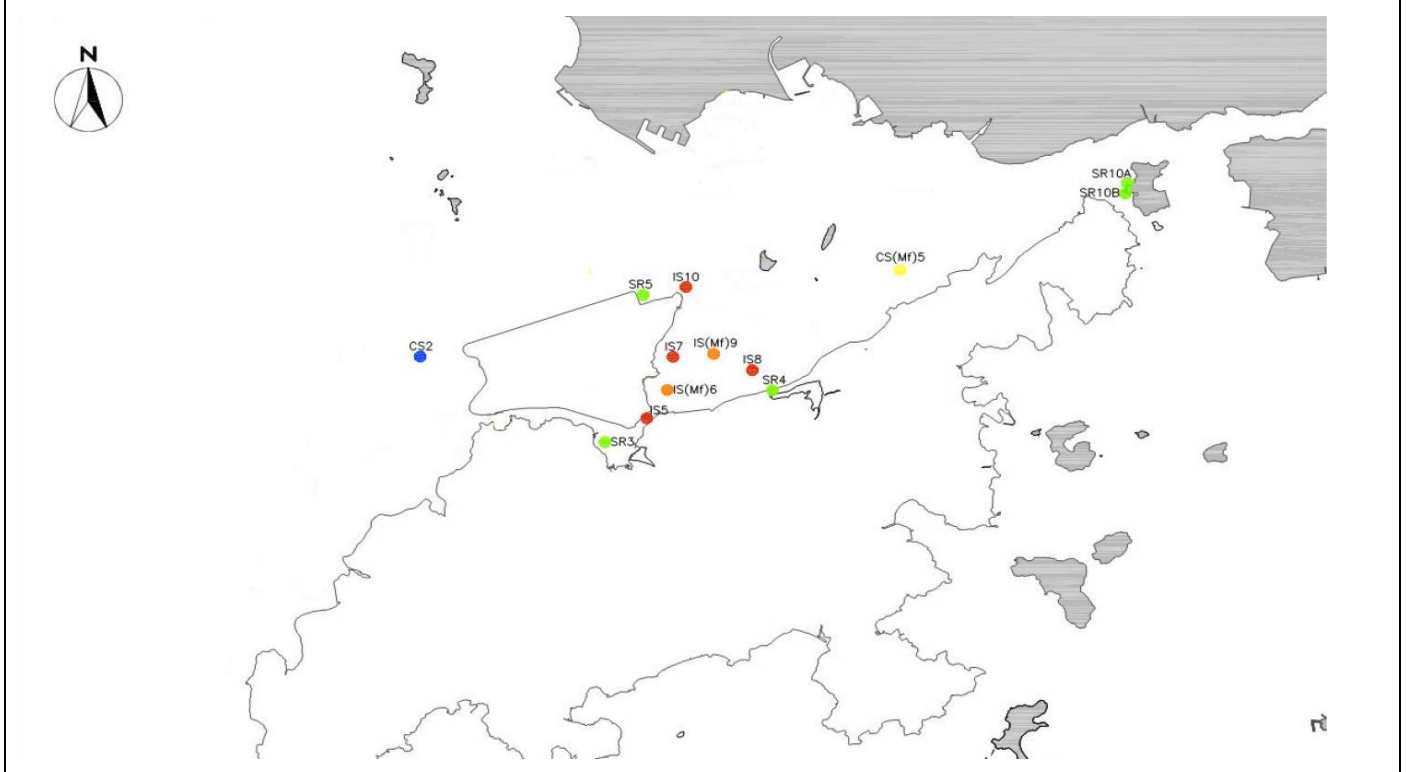
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 13 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.: 118

Date of Notification: 18 March 2013

Works Inspected: Data collected from water sampling works on 1 March 2013 and the test report was issued on 8 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: 3.62 x 120% = 4.3 mg/L for mid ebb) AND CS(Mf)5: 3.52 x 120% = 4.2 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: 3.62 x 130% = 4.7 mg/L for mid ebb) AND CS(Mf)5: 3.52 x 130% = 4.6 mg/L for mid flood)	<u>5.7</u>	<u>8.4</u>
SS	IS(Mf)6	DA			<u>8.9</u>	<u>5.5</u>
SS	IS7	DA			<u>6.7</u>	<u>7.0</u>
SS	IS8	DA			<u>5.0</u>	<u>5.0</u>
SS	IS10	DA			4.4	<u>5.1</u>
SS	SR3	DA			<u>5.7</u>	<u>4.8</u>
SS	SR5	DA			3.8	<u>14.1</u>
SS	SR10A	DA			4.1	<u>4.7</u>
SS	SR10B	DA			3.6	<u>5.2</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 March 2013, an AL exceedance at station IS10 and LL exceedances at stations IS5, IS(Mf)6, IS7, IS8 and SR3 were recorded for mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS10, SR3, 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, rock/sand filling and rock transfer activities were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS5, IS(Mf)6, IS7, IS8, IS10, SR3, 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
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
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
SR10A	3.6	to 17	4.8	to 19.2
SR10B	3.1	to 30.8	5.7	to 26.7

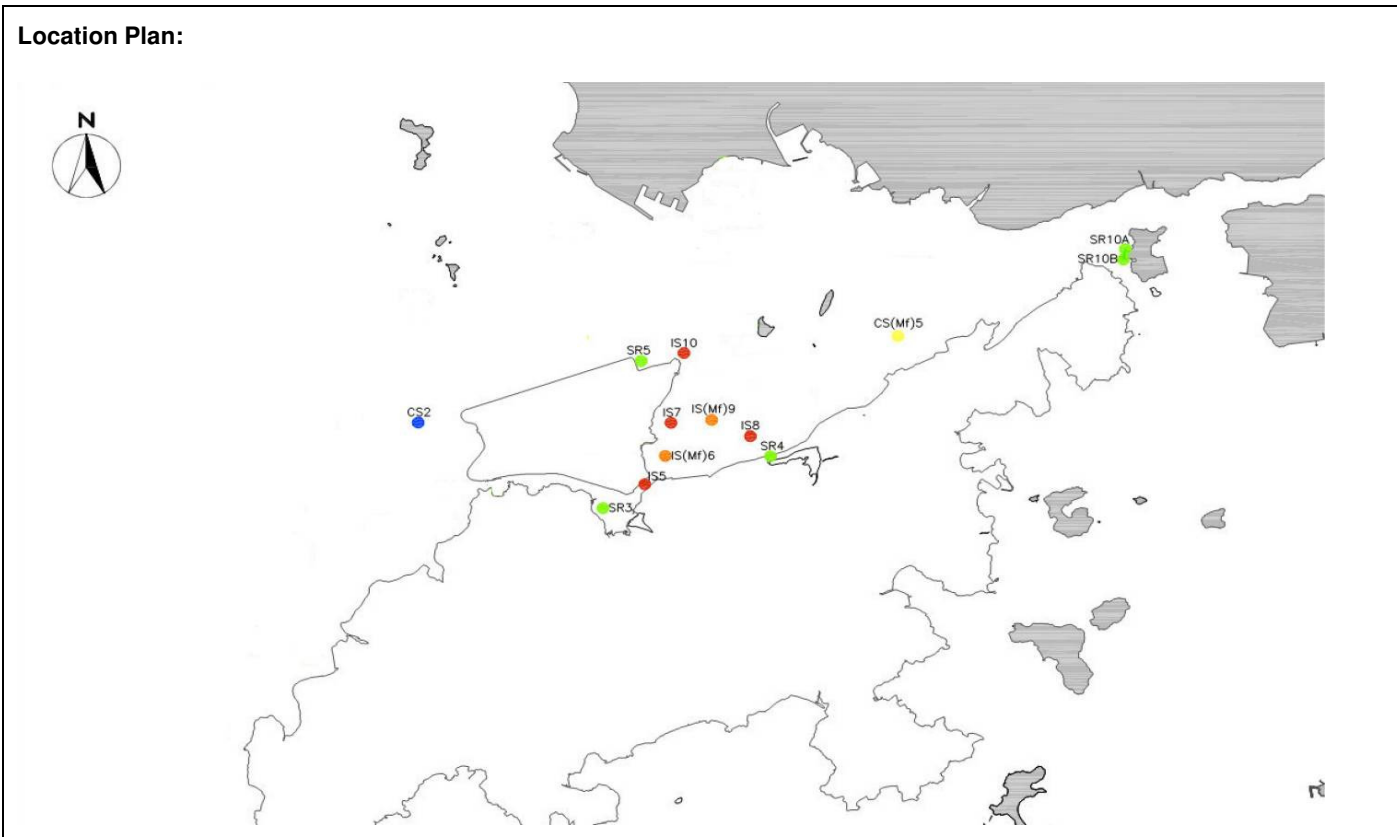
The measured values at stations IS5, IS(Mf)6, IS7, IS8, IS10, SR3, SR5, SR10A and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.


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

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 : 18 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.: 119

Date of Notification: 18 March 2013

Works Inspected: Data collected from water sampling works on 8 March 2013 and the results were issued on 11 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 (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: 2.58 x 120% = 3.1 for mid ebb AND CS(Mf)5: 1.6 x 120% = 1.9 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 2.58x 130% = 3.4 for mid ebb AND CS(Mf)5: 1.6 x 130% = 2.1 for mid flood)	3.2	<u>2.5</u>
TURB	IS(Mf)6	DA			<u>7.1</u>	<u>7.3</u>
TURB	IS7	DA			<u>6.3</u>	<u>5.1</u>
TURB	IS8	DA			3.0	<u>2.7</u>
TURB	IS(Mf)9	DA			2.1	<u>2.7</u>
TURB	IS10	DA			<u>3.7</u>	<u>3.1</u>
TURB	SR3	DA			2.3	<u>2.4</u>
TURB	SR4	DA			2.1	<u>2.8</u>
TURB	SR5	DA			2.1	2.1

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 8 March 2013, an AL exceedance at station IS5 and LL exceedances at stations IS(Mf)6, IS7 and IS10 were recorded during mid-ebb tide. An AL exceedance at station SR5 and LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 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. Installation of stone column 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 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
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 values 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.

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

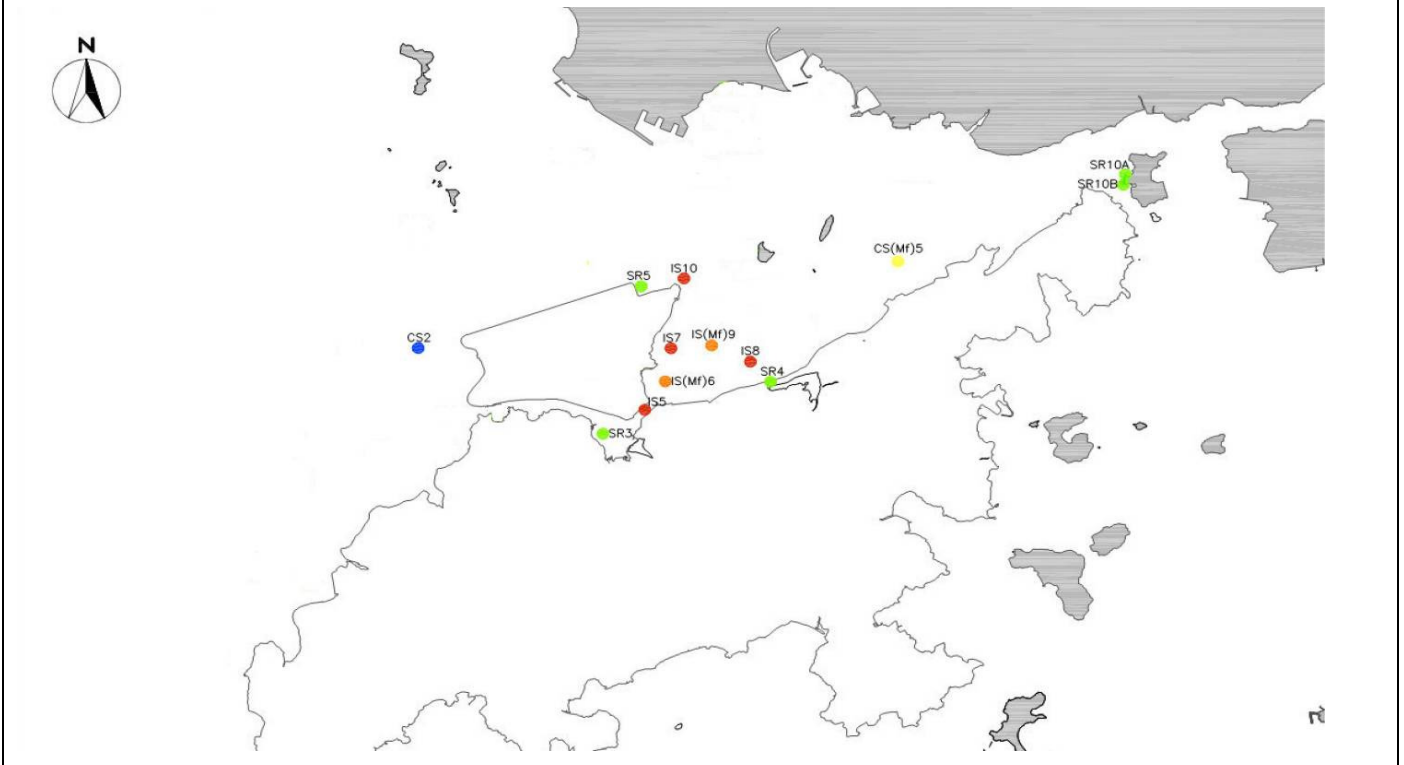
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 18 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.: 120

Date of Notification: 18 March 2013

Works Inspected: Data collected from water sampling works on 11 March 2013 and the results were issued on 11 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 (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: 4.45 x 120% = 5.3 for mid ebb AND CS(Mf)5: 3.42 x 120% = 4.1 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 4.45 x 130% = 5.8 for mid ebb AND CS(Mf)5: 3.42 x 130% = 4.4 for mid flood)	4.4	<u>4.7</u>
TURB	IS(Mf)6	DA			3.6	<u>5.8</u>
TURB	IS7	DA			<u>7.0</u>	<u>7.9</u>
TURB	IS8	DA			4.3	<u>7.4</u>
TURB	IS(Mf)9	DA			4.3	<u>5.6</u>
TURB	IS10	DA			5.1	<u>7.7</u>
TURB	SR3	DA			4.4	<u>6.7</u>
TURB	SR4	DA			3.8	<u>6.6</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 11 March 2013, a LL exceedance at station IS7 was recorded during mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 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. Installation of stone column 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 and SR4 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

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

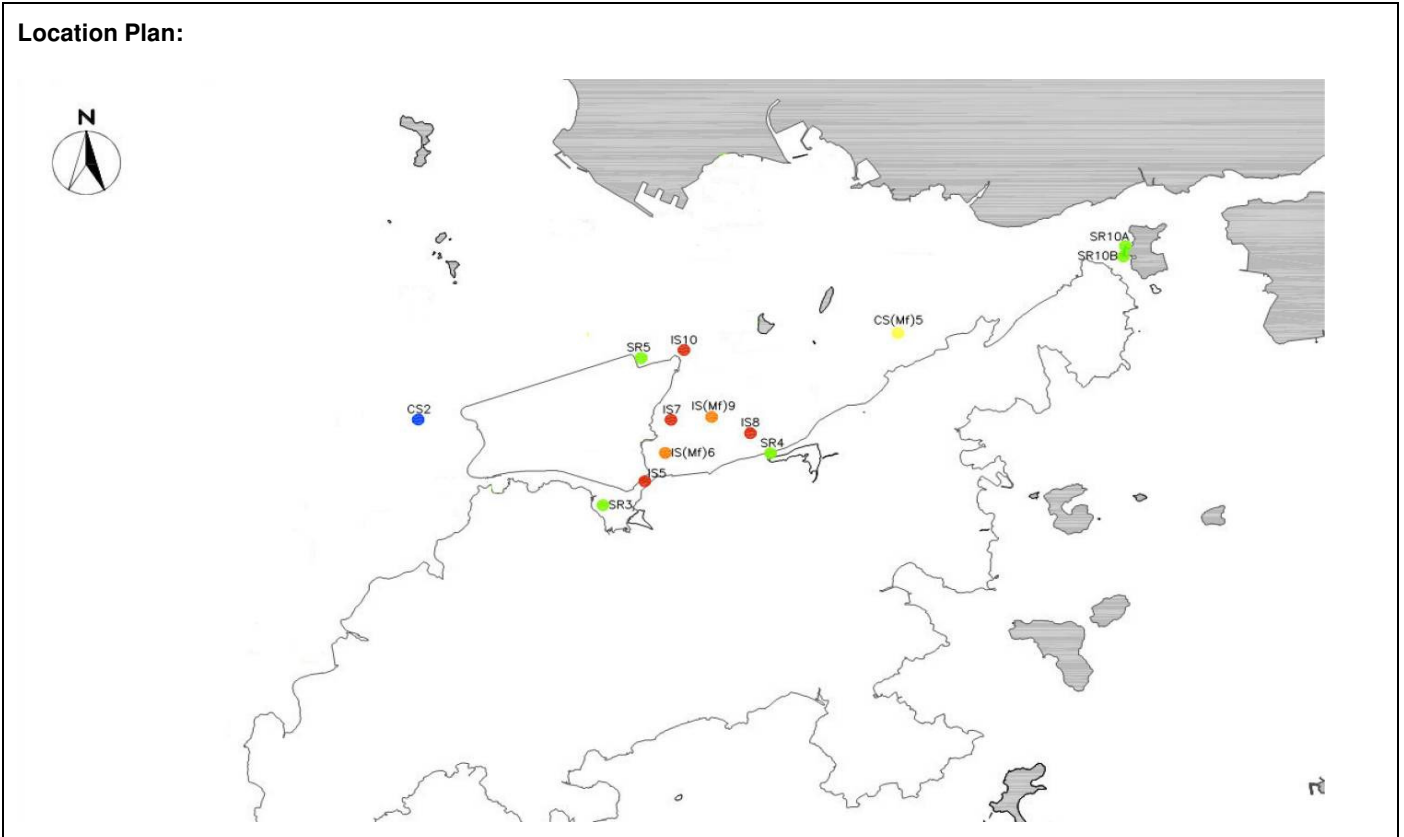
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 18 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.: 121

Date of Notification: 18 March 2013

Works Inspected: Data collected from water sampling works on 4 March 2013 and the test report was issued on 11 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: $3.97 \times 120\% = 4.8$ mg/L for mid ebb) AND CS(Mf)5: $4.38 \times 120\% = 5.3$ 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: $3.97 \times 130\% = 5.2$ mg/L for mid ebb) AND CS(Mf)5: $4.38 \times 130\% = 5.7$ mg/L for mid flood)	<u>6.5</u>	<u>7.0</u>
SS	IS(Mf)6	DA			<u>8.1</u>	<u>8.9</u>
SS	IS7	DA			<u>7.6</u>	<u>7.7</u>
SS	IS8	DA			<u>5.3</u>	5.3
SS	IS(Mf)9	DA			<u>5.9</u>	<u>7.7</u>
SS	IS10	DA			<u>6.3</u>	<u>8.6</u>
SS	SR3	DA			<u>6.0</u>	<u>8.6</u>
SS	SR4	DA			<u>5.9</u>	<u>6.5</u>
SS	SR5	DA			<u>7.2</u>	<u>15.6</u>
SS	SR10A	DA			<u>5.4</u>	<u>5.8</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 4 March 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A were recorded for mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A 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 IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A 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
SR10A	3.6	to 17	4.8	to 19.2

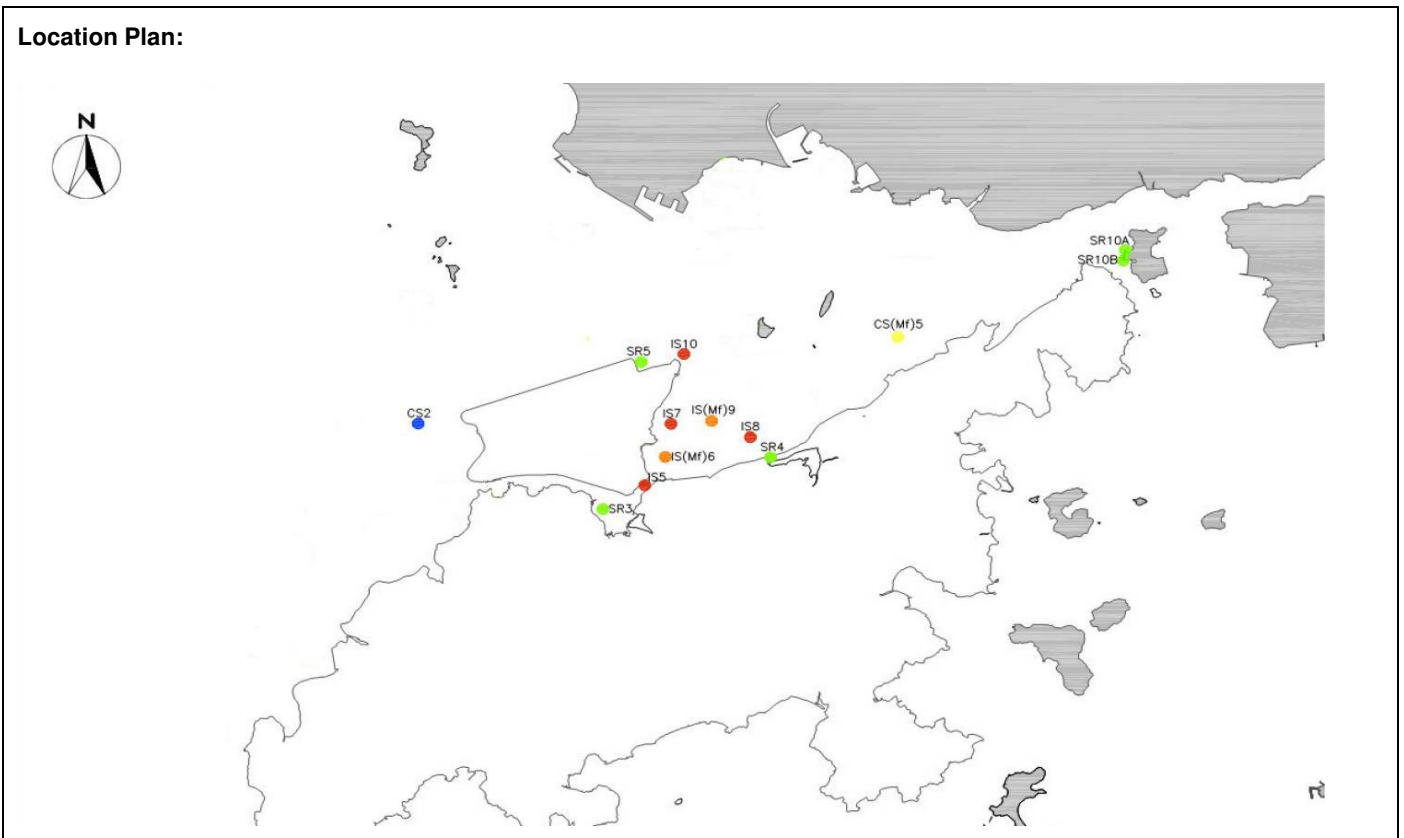
The measured values at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3, SR4, SR5 and SR10A were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.


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 : 18 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.: 122

Date of Notification: 18 March 2013

Works Inspected: Data collected from water sampling works on 6 March 2013 and the test report was issued on 13 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: 6.17 x 120% = 7.4 mg/L for mid ebb) AND CS(Mf)5: 2.72 x 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: 6.17 x 130% = 8.0 mg/L for mid ebb) AND CS(Mf)5: 2.72 x 130% = 3.5 mg/L for mid flood)	3.7	<u>5.1</u>
SS	IS(Mf)6	DA			3.1	<u>5.5</u>
SS	IS7	DA			3.6	<u>5.0</u>
SS	IS10	DA			3.1	<u>8.0</u>
SS	SR3	DA			3.4	<u>3.9</u>
SS	SR4	DA			3.1	<u>4.9</u>
SS	SR5	DA			3.0	<u>6.4</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 6 March 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, 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. Transferring fill material activity was carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS5, IS(Mf)6, IS7, 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
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, IS10, SR3, SR4 and SR5 were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

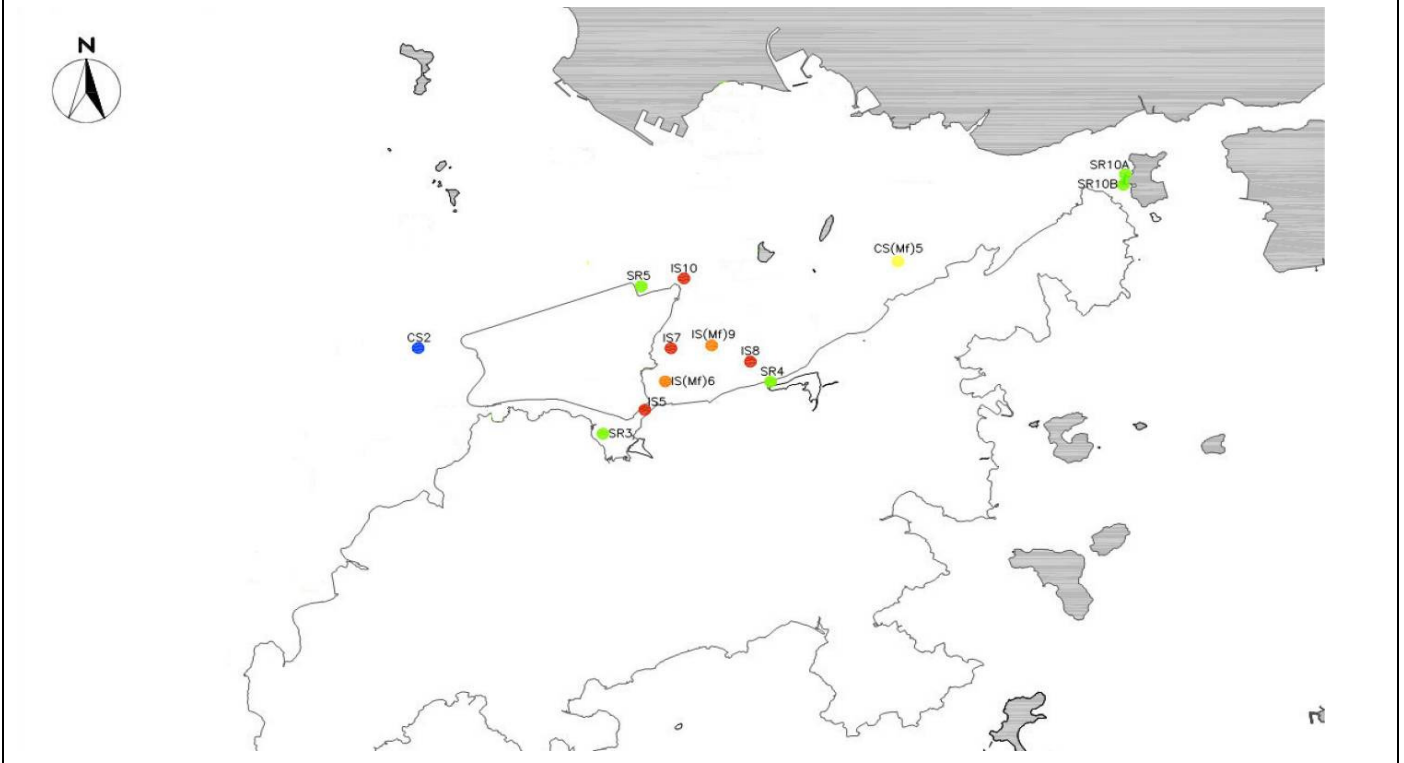
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 : 18 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.: 123

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 13 March 2013 and the results were issued on 14 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 (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: 6.73 x 120% = 8.1 for mid ebb AND CS(Mf)5: 6.17 x 120% = 7.4 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 6.73 x 130% = 8.8 for mid ebb AND CS(Mf)5: 6.17 x 130% = 8.0 for mid flood)	5.6	<u>9.2</u>
TURB	IS7	DA			4.8	<u>8.4</u>
TURB	IS(Mf)9	DA			4.5	<u>10.4</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 13 March 2013, LL exceedances at stations IS(Mf)6, 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 reason:

1. Installation of stone column and rock filling were carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS(Mf)6, IS7 and IS(Mf)9 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

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

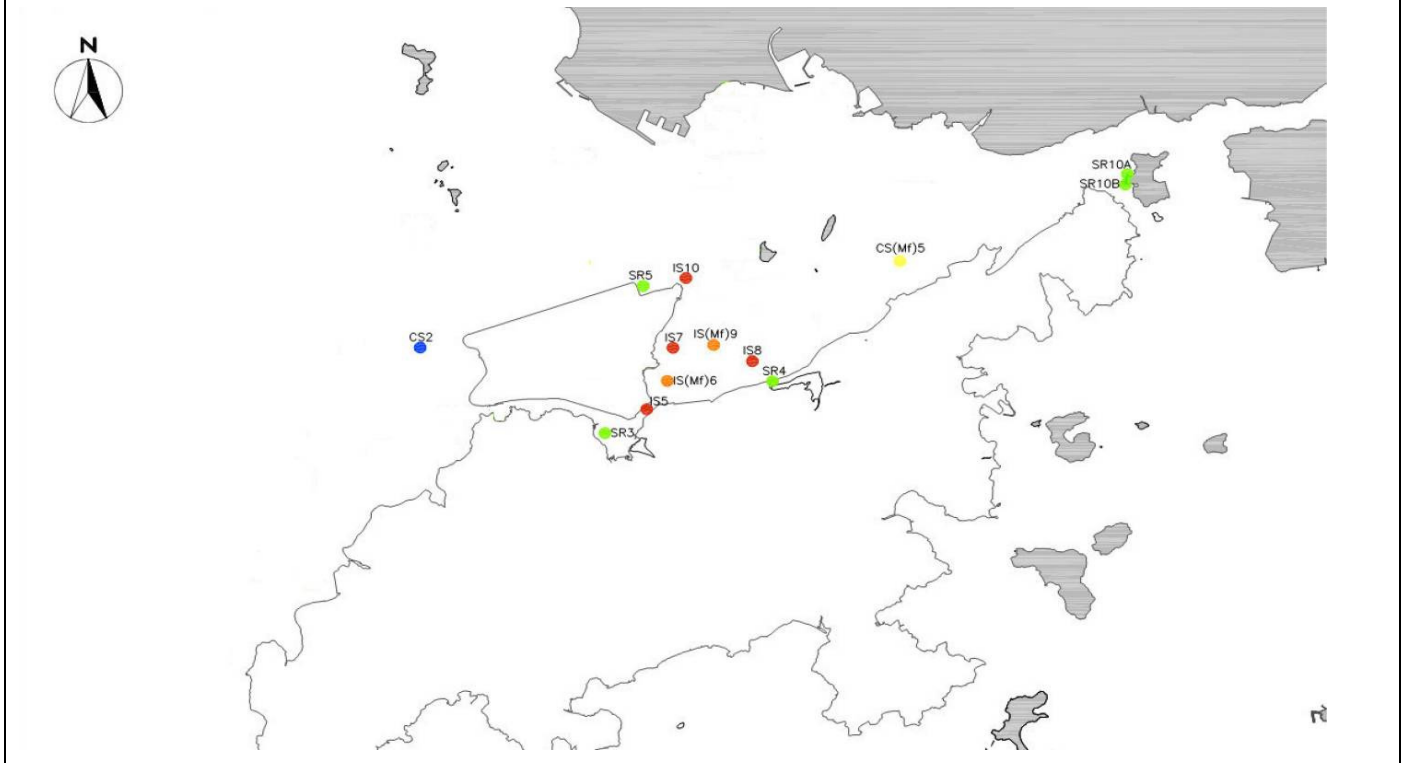
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 25 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.: 124

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 8 March 2013 and the test report was issued on 15 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: 4.35 x 120% = 5.2 mg/L for mid ebb) AND CS(Mf)5: 3.65 x 120% = 4.4 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: 4.35 x 130% = 5.7 mg/L for mid ebb) AND CS(Mf)5: 3.65 x 130% = 4.7 mg/L for mid flood)	<u>6.5</u>	4.3
SS	IS7	DA			4.3	<u>6.0</u>
SS	IS(Mf)9	DA			4.3	<u>4.9</u>
SS	SR4	DA			<u>5.7</u>	<u>4.5</u>
SS	SR10B	DA			4.4	<u>4.7</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 8 March 2013, an AL exceedance at station SR4 and a LL exceedance at station IS(Mf)6 were recorded during mid-ebb tide. AL exceedances at stations SR4 and SR10B and LL exceedances at stations 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:

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, IS(Mf)9, SR4 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
IS(Mf)9	5.5	to 20.1	7.3	to 26
SR4	5.3	to 20	5.6	to 24.5
SR10B	3.1	to 30.8	5.7	to 26.7

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

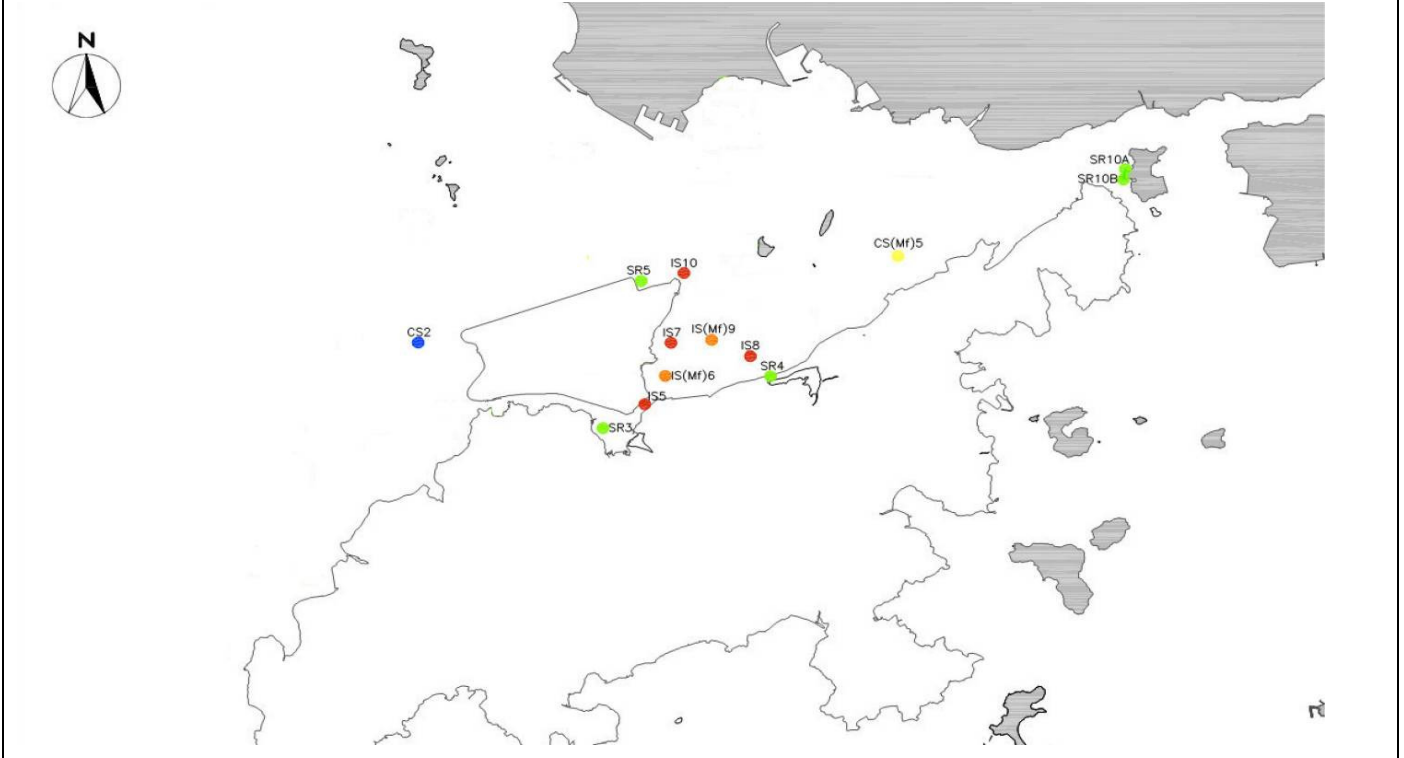
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 : 25 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.: 125

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 11 March 2013 and the test report was issued on 18 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: 5.88 x 120% = 7.1 mg/L for mid ebb) AND CS(Mf)5: 4.2 x 120% = 5.0 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: 5.88 x 130% = 7.6 mg/L for mid ebb) AND CS(Mf)5: 4.2 x 130% = 5.5 mg/L for mid flood)	5.6	<u>5.6</u>
SS	IS(Mf)6	DA			5.4	<u>5.4</u>
SS	IS7	DA			6.1	<u>7.5</u>
SS	IS8	DA			3.1	<u>9.2</u>
SS	IS(Mf)9	DA			4.4	<u>6.0</u>
SS	IS10	DA			3.3	<u>9.6</u>
SS	SR3	DA			4.3	<u>7.1</u>
SS	SR4	DA			3.9	<u>10.2</u>
SS	SR5	DA			4.8	<u>6.2</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 March 2013, an AL exceedance at station IS(Mf)6 and LL exceedances at stations IS5, 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 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 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.

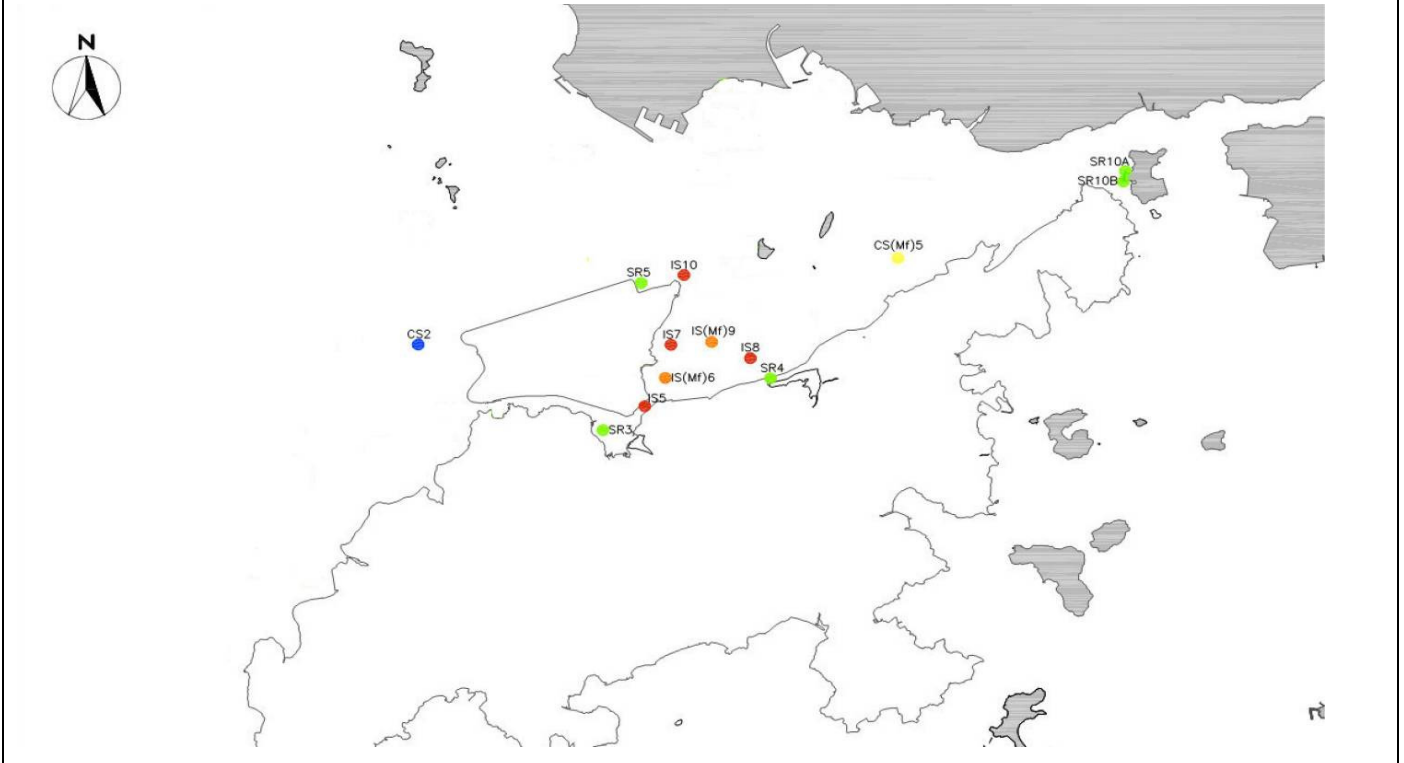
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 : 25 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.: 126

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 13 March 2013 and the test report was issued on 20 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: 5.17 x 120% = 6.2 mg/L for mid ebb) AND CS(Mf)5: 3.12 x 120% = 3.7 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: 5.17 x 130% = 6.7 mg/L for mid ebb) AND CS(Mf)5: 3.12 x 130% = 4.1 mg/L for mid flood)	3.2	<u>4.5</u>
SS	IS(Mf)6	DA			4.3	<u>11.0</u>
SS	IS7	DA			1.5	<u>7.3</u>
SS	IS8	DA			4.1	<u>6.4</u>
SS	IS(Mf)9	DA			5.0	<u>12.2</u>
SS	IS10	DA			3.7	<u>4.6</u>
SS	SR3	DA			3.9	<u>5.5</u>
SS	SR4	DA			3.1	<u>6.0</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 13 March 2013, LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 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 reasons:

1. Installation of stone column and rock filling were carried 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 and 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	
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

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

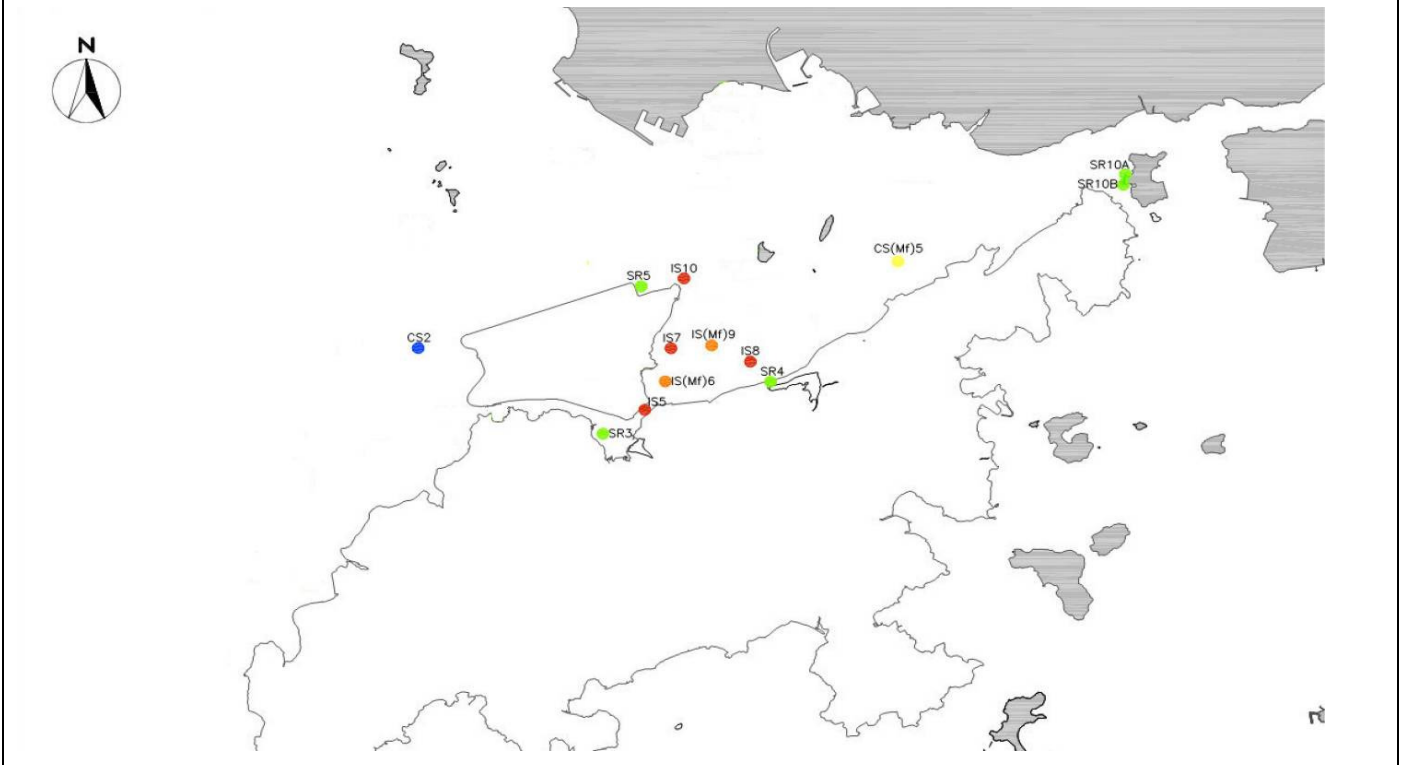
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.


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 : 25 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.: 127

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 15 March 2013 and the results were issued on 18 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 (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: 6.77 x 120% = 8.1 for mid ebb AND CS(Mf)5: 3.05 x 120% = 3.7 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 6.77 x 130% = 8.8 for mid ebb AND CS(Mf)5: 3.05 x 130% = 4.0 for mid flood)	5.8	<u>3.9</u>
TURB	IS7	DA			2.9	<u>4.3</u>
TURB	IS8	DA			3.6	<u>5.1</u>
TURB	IS(Mf)9	DA			3.7	<u>9.7</u>
TURB	IS10	DA			6.4	<u>7.3</u>
TURB	SR3	DA			3.2	<u>4.1</u>
TURB	SR5	DA			4.4	<u>13.6</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 March 2013, an AL exceedance at station IS(Mf)6 and LL exceedances at stations IS7, IS8, IS(Mf)9, IS10, SR3 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. Installation of stone column and rock filling were carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 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	
	Min	Max	Min	Max
IS(Mf)6	3.3	21.7	5.3	20.9
IS7	3.4	20	5	19.4
IS8	4	12.2	4.5	24.5
IS(Mf)9	2.7	17	3.4	22.6
IS10	6.7	14.7	8.4	20.8
SR3	4.6	65.7	7.7	19.7
SR5	5.2	12.4	7.1	30.9

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

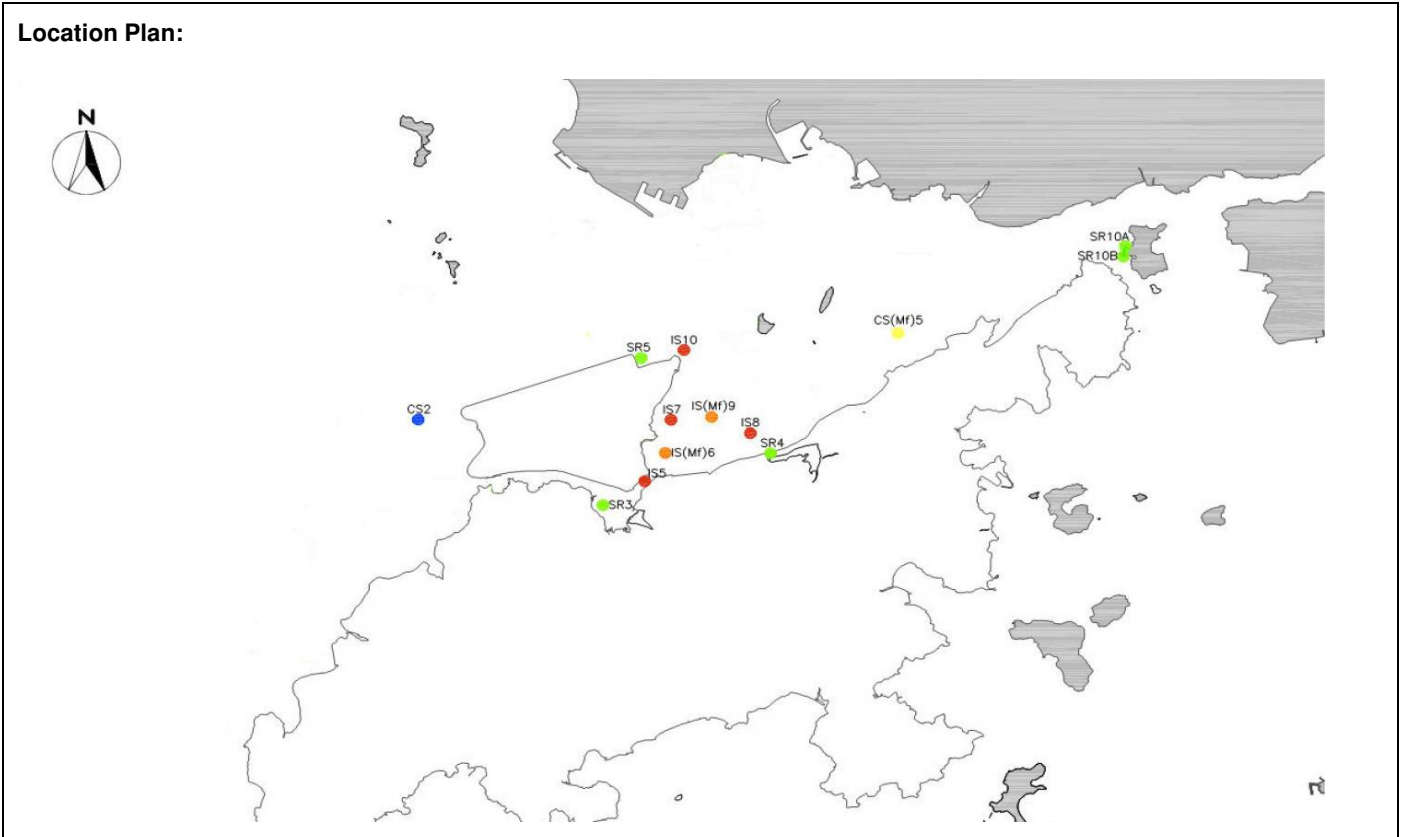
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 25 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.: 128

Date of Notification: 25 March 2013

Works Inspected: Data collected from water sampling works on 15 March 2013 and the test report was issued on 22 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: 4.32 x 120% = 5.2 mg/L for mid ebb) AND CS(Mf)5: 3.20 x 120% = 3.8 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: 4.32 x 130% = 5.6 mg/L for mid ebb) AND CS(Mf)5: 3.20 x 130% = 4.2 mg/L for mid flood)	4.3	<u>4.5</u>
SS	IS7	DA			3.5	<u>5.7</u>
SS	IS8	DA			3.7	<u>5.9</u>
SS	IS(Mf)9	DA			3.4	<u>12.0</u>
SS	IS10	DA			3.5	<u>6.9</u>
SS	SR3	DA			3.9	<u>4.6</u>
SS	SR5	DA			4.5	<u>13.0</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 15 March 2013, LL exceedances at stations IS(Mf)6, IS7, IS8, IS(Mf)9, IS10, SR3 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 reasons:

1. Installation of stone column and rock filling were 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 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	
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 stations 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.

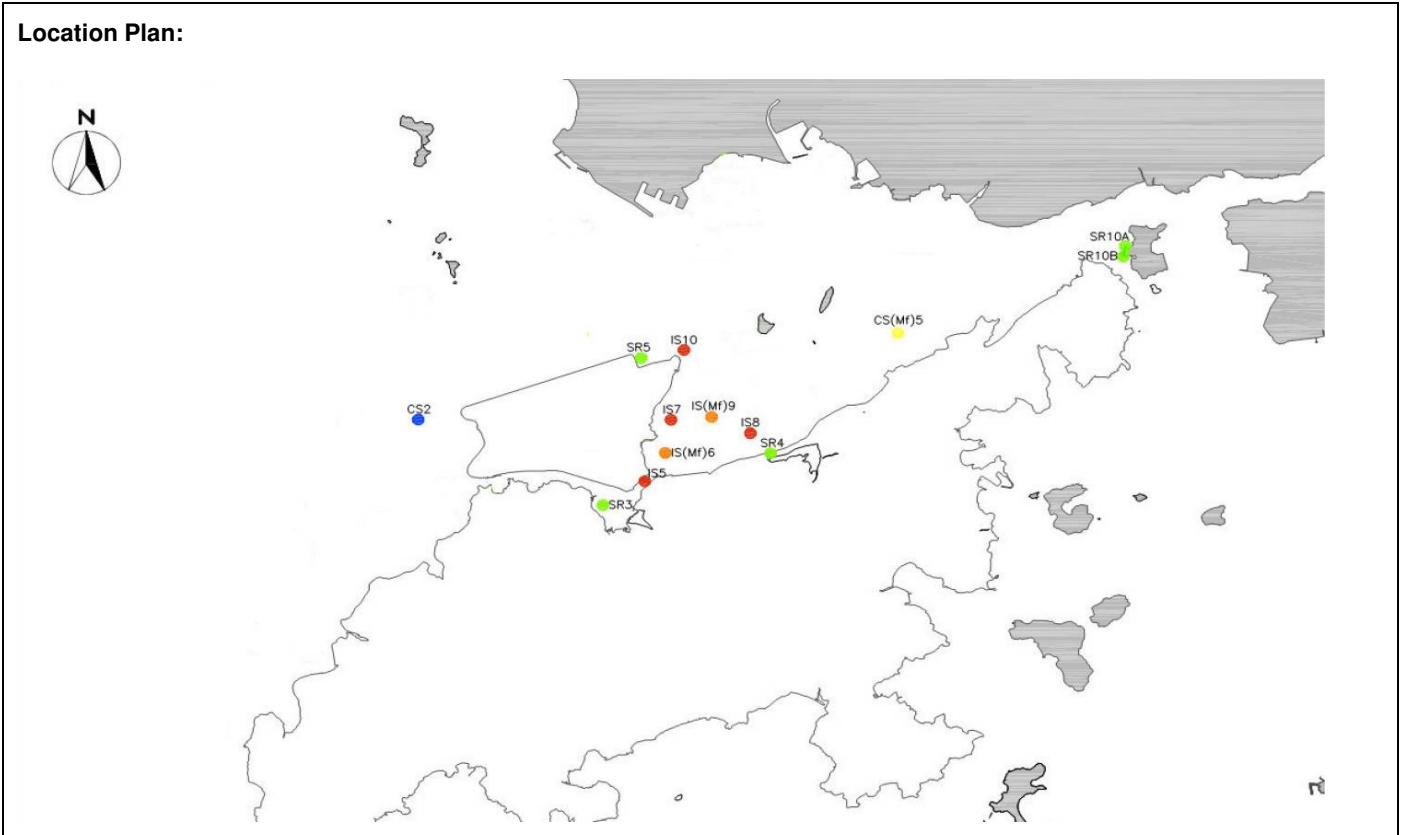
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 : 25 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.: 129

Date of Notification: 2 April 2013

Works Inspected: Data collected from water sampling works on 18 March 2013 and the results were issued on 19 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 (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: 5.68 x 120% = 6.8 for mid ebb AND CS(Mf)5: 3.48 x 120% = 4.2 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 5.68 x 130% = 7.4 for mid ebb AND CS(Mf)5: 3.48 x 130% = 4.5 for mid flood)	4.7	<u>5.2</u>
TURB	IS(Mf)9	DA			3.2	4.4
TURB	SR3	DA			4.4	<u>4.9</u>
TURB	SR5	DA			<u>8.8</u>	4.3

Notes:

DA means depth average.

Italic means AL exceedances.

Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

On 18 March 2013, a LL exceedance at station SR5 was recorded during mid-ebb tide. An AL exceedance at station IS(Mf)9, SR5 and LL exceedances at stations IS5 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. Installation of stone column and rock filling were carried within silt curtain as recommended in the EIA Report.
2. The range of turbidity at stations IS5, IS(Mf)9, SR3 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)9	2.7	to 17	3.4	to 22.6
SR3	4.6	to 65.7	7.7	to 19.7
SR5	5.2	to 12.4	7.1	to 30.9

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

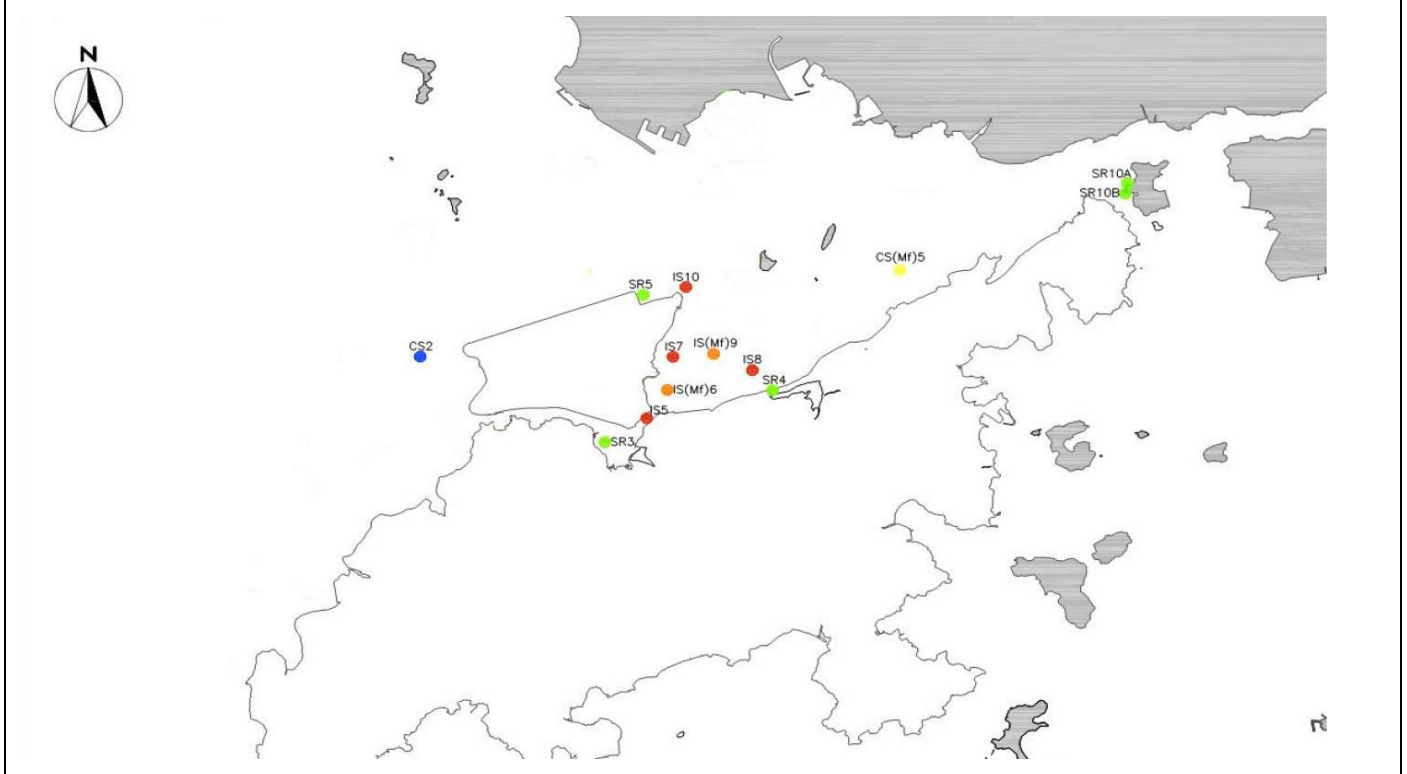
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 2 April 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.: 130

Date of Notification: 2 April 2013

Works Inspected: Data collected from water sampling works on 18 March 2013 and the test report was issued on 25 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: 4.17 x 120% = 5.0 mg/L for mid ebb) AND CS(Mf)5: 3.70 x 120% = 4.4 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: 4.17 x 130% = 5.4 mg/L for mid ebb) AND CS(Mf)5: 3.70 x 130% = 4.8 mg/L for mid flood)	5.0	4.7
SS	IS8	DA			3.7	6.8
SS	SR5	DA			7.6	4.0
SS	SR10B	DA			2.5	4.5

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 18 March 2013, a LL exceedance at station SR5 was recorded during mid-ebb tide. AL exceedances at stations IS5 and SR10B and LL exceedance at station IS8 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:

1. Installation of stone column and rock filling were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS5, IS8, 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
IS8	5.5	to 25.5	5.8	to 31.3
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, IS8, SR5 and SR10B were within the ranges of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

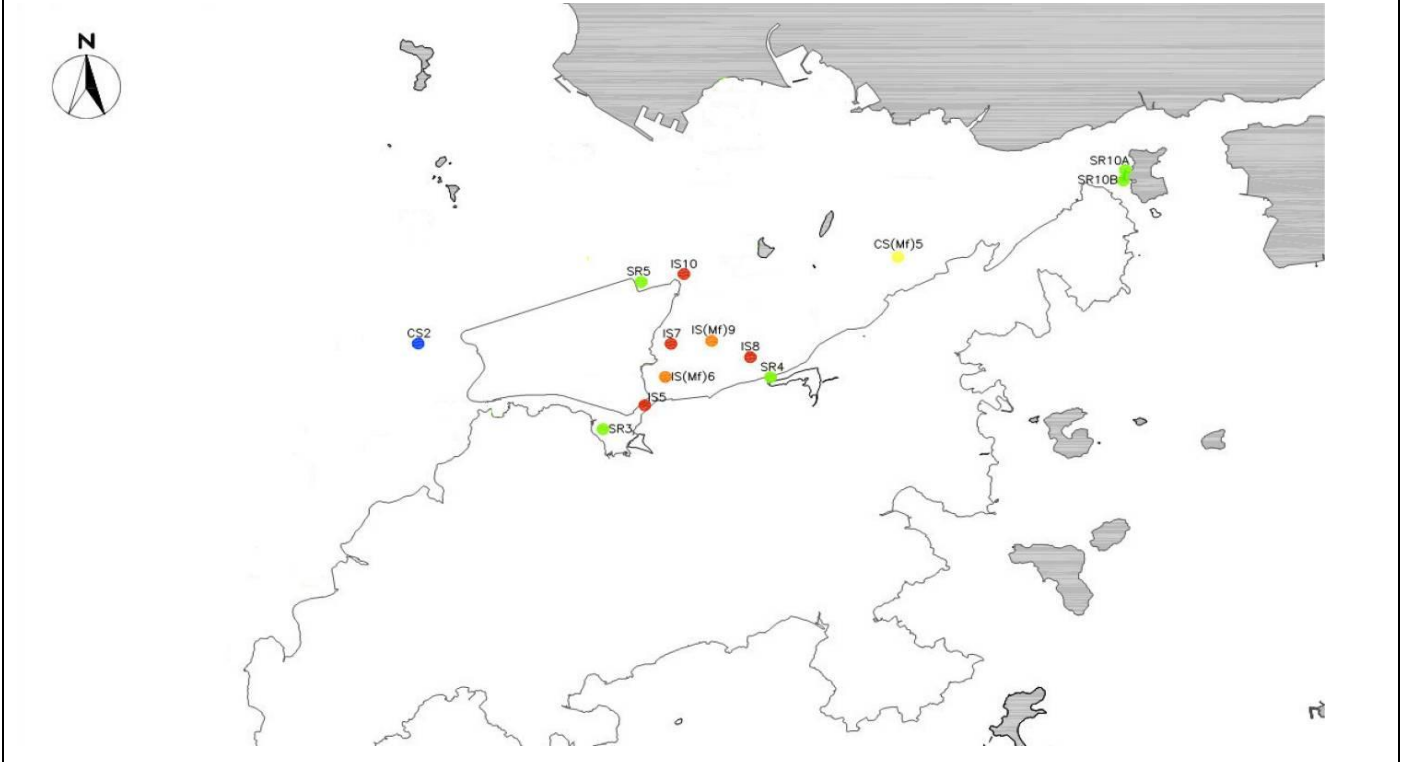
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 2 April 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.: 131

Date of Notification: 2 April 2013

Works Inspected: Data collected from water sampling works on 20 March 2013 and the results were issued on 25 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 (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: 4.92 x 120% = 5.9 for mid ebb AND CS(Mf)5: 2.12 x 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: 4.92 x 130% = 6.4 for mid ebb AND CS(Mf)5: 2.12 x 130% = 2.8 for mid flood)	4.2	<u>4.2</u>
TURB	IS(Mf)6	DA			3.8	<u>8.9</u>
TURB	IS7	DA			3.4	<u>3.9</u>
TURB	IS8	DA			6.1	<u>7.5</u>
TURB	IS(Mf)9	DA			5.3	<u>4.3</u>
TURB	IS10	DA			4.1	<u>4.8</u>
TURB	SR3	DA			2.7	<u>3.7</u>
TURB	SR4	DA			6.3	<u>4.2</u>
TURB	SR5	DA			4.3	<u>4.8</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 20 March 2013, AL exceedance at station IS8 and SR4 were recorded during mid-ebb tide. LL exceedance at station IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR10, SR3, SR4, 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. Installation of stone column and rock filling 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, 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	
	Min	Max	Min	Max
IS5	5.8	19.2	5.7	21.4
IS(Mf)6	3.3	21.7	5.3	20.9
IS7	3.4	20	5	19.4
IS8	4	12.2	4.5	24.5
IS(Mf)9	2.7	17	3.4	22.6
IS10	6.7	14.7	8.4	20.8
SR3	4.6	65.7	7.7	19.7
SR4	5.2	18.9	5	20.6
SR5	5.2	12.4	7.1	30.9

The measured values 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.

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

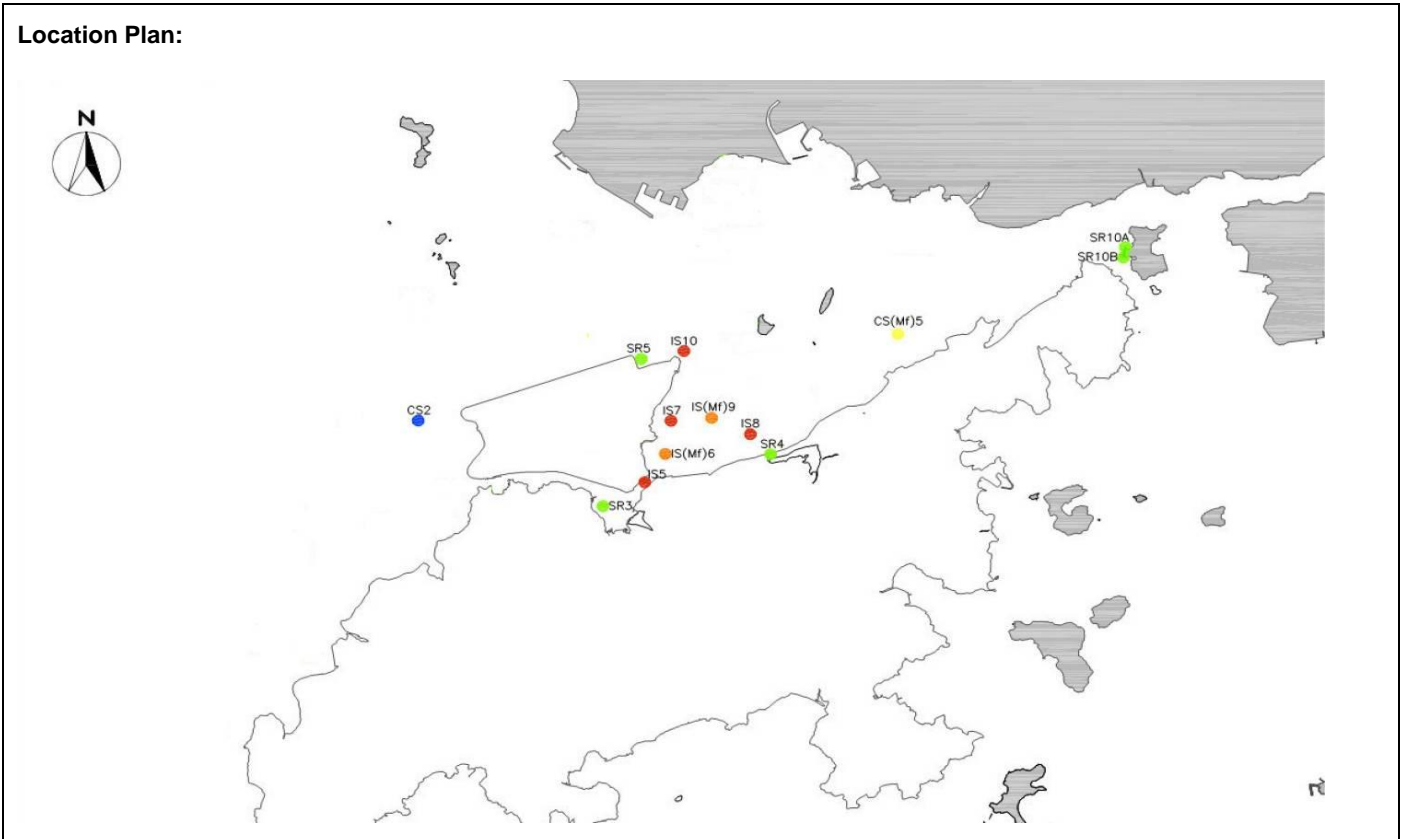
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 April 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.: 132

Date of Notification: 2 April 2013

Works Inspected: Data collected from water sampling works on 20 March 2013 and the test report was issued on 27 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: 3.65 x 120% = 4.4 mg/L for mid ebb) AND CS(Mf)5: 2.67 x 120% = 3.2 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: 3.65 x 130% = 4.7 mg/L for mid ebb) AND CS(Mf)5: 2.67 x 130% = 3.5 mg/L for mid flood)	2.8	<u>3.7</u>
SS	IS8	DA			<u>6.3</u>	2.7
SS	IS(Mf)9	DA			<u>5.4</u>	<u>3.6</u>
SS	IS10	DA			3.0	<u>3.7</u>
SS	SR3	DA			2.6	<u>3.8</u>
SS	SR4	DA			<u>6.0</u>	<u>4.0</u>
SS	SR5	DA			3.2	<u>3.6</u>
SS	SR10B	DA			2.7	<u>3.3</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 March 2013, LL exceedance at stations IS8, IS(Mf)9 and SR4 were recorded during mid-ebb tide. AL exceedance at station SR10B and LL exceedances at stations IS5, 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 reasons:

1. Installation of stone column and rock filling were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS5, 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
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, 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.

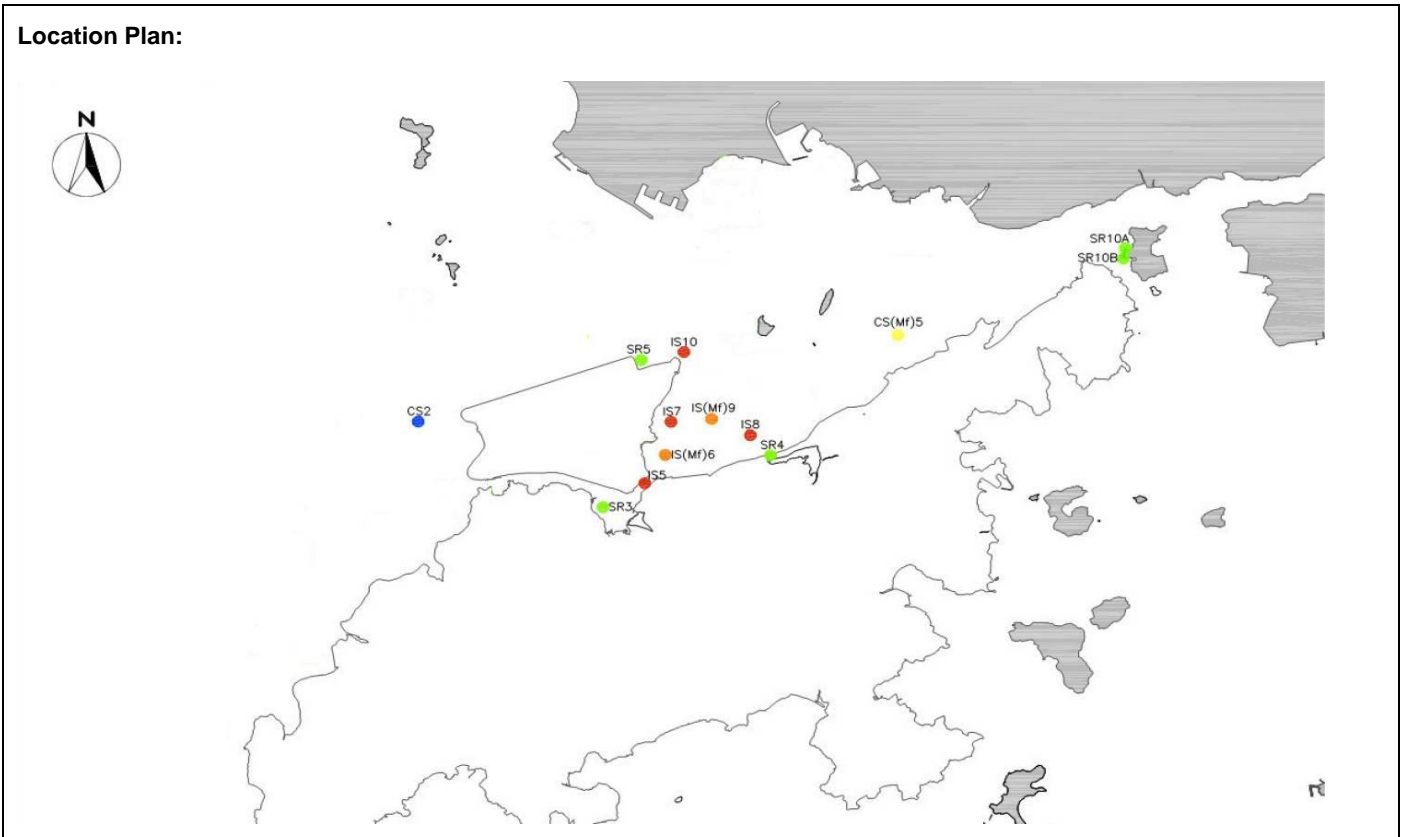
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 April 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.: 133

Date of Notification: 2 April 2013

Works Inspected: Data collected from water sampling works on 22 March 2013 and the results were issued on 25 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 (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: 3.65 x 120% = 4.4 for mid ebb AND CS(Mf)5: 1.78 x 120% = 2.1 for mid flood)	47.0 or 130% of upstream control station's turbidity at the same tide of the same day (i.e. CS2: 3.65 x 130% = 4.7 for mid ebb AND CS(Mf)5: 1.78 x 130% = 2.3 for mid flood)	<u>7.4</u>	<u>9.1</u>
TURB	IS(Mf)6	DA			<u>4.9</u>	<u>4.0</u>
TURB	IS7	DA			3.1	<u>3.5</u>
TURB	IS8	DA			<u>5.3</u>	<u>5.1</u>
TURB	IS(Mf)9	DA			<u>4.9</u>	<u>4.7</u>
TURB	IS10	DA			<u>5.1</u>	<u>3.5</u>
TURB	SR3	DA			3.5	<u>6.5</u>
TURB	SR4	DA			4.0	<u>12.7</u>
TURB	SR5	DA			<u>5.7</u>	<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 March 2013, LL exceedances at stations IS5, IS(Mf)6, IS8, IS(Mf)9, IS10 and SR5 were recorded during mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR10, SR3, SR4, 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. Installation of sand and rock filling 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, 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	
	Min	Max	Min	Max
IS5	5.8	19.2	5.7	21.4
IS(Mf)6	3.3	21.7	5.3	20.9
IS7	3.4	20	5	19.4
IS8	4	12.2	4.5	24.5
IS(Mf)9	2.7	17	3.4	22.6
IS10	6.7	14.7	8.4	20.8
SR3	4.6	65.7	7.7	19.7
SR4	5.2	18.9	5	20.6
SR5	5.2	12.4	7.1	30.9

The measured values 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.

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

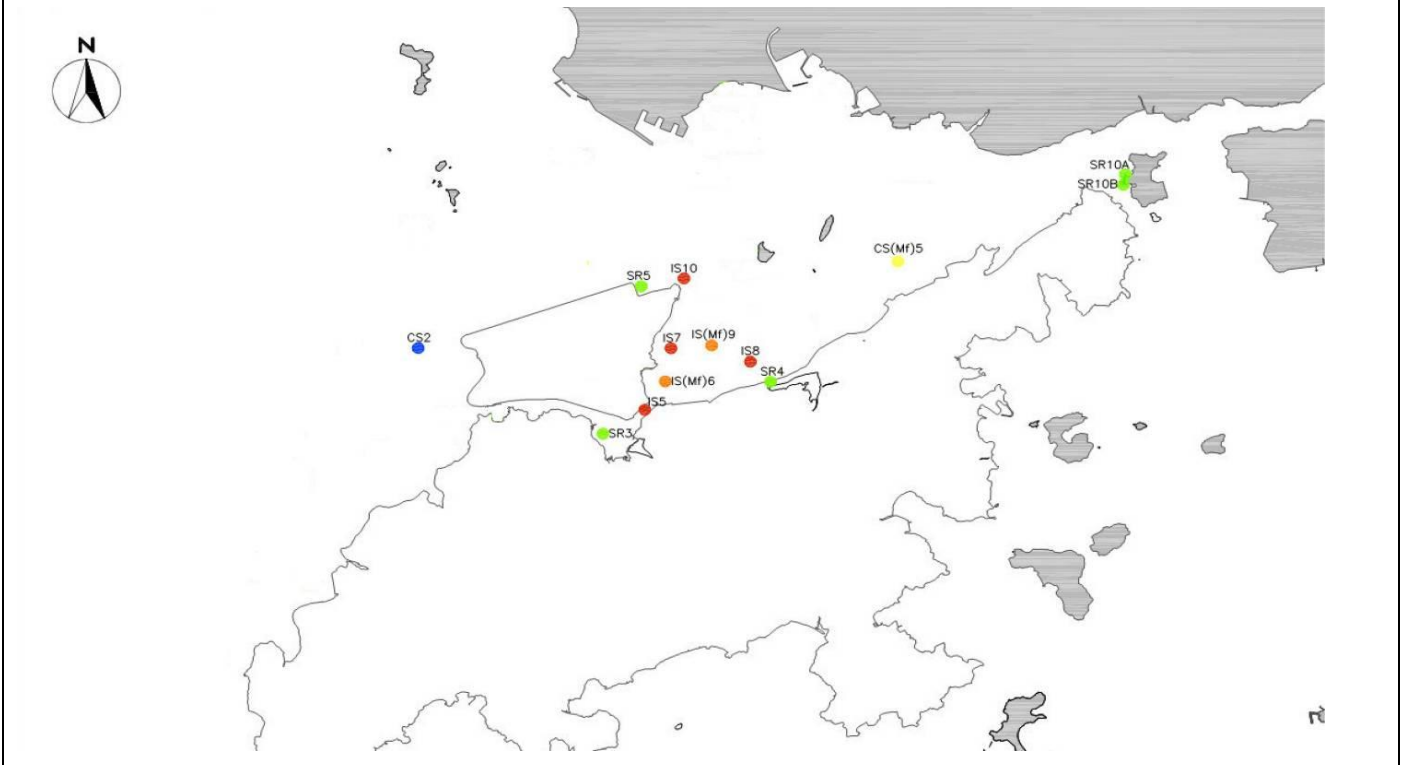
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 April 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.: 134

Date of Notification: 8 April 2013

Works Inspected: Data collected from water sampling works on 22 March 2013 and the test report was issued on 2 April 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: 4.95 x 120% = 5.9 mg/L for mid ebb) AND CS(Mf)5: 3.30 x 120% = 4.0 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: 4.95 x 130% = 6.4 mg/L for mid ebb) AND CS(Mf)5: 3.30 x 130% = 4.3 mg/L for mid flood)	<u>6.8</u>	<u>13.7</u>
SS	IS(Mf)6	DA			4.7	<u>5.4</u>
SS	IS7	DA			3.3	<u>4.4</u>
SS	IS8	DA			3.2	<u>4.5</u>
SS	IS(Mf)9	DA			4.8	<u>5.0</u>
SS	SR3	DA			3.3	<u>8.3</u>
SS	SR4	DA			4.4	<u>8.1</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 22 March 2013, LL exceedance at station IS5 was recorded during mid-ebb tide. LL exceedances at stations IS5, IS(Mf)6, IS7, IS8, IS(Mf)9, SR3 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 reasons:

1. Sand and rock filling were carried 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, SR3 and 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	
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
SR3	6.7	to 31	7.6	to 28
SR4	5.3	to 20	5.6	to 24.5

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

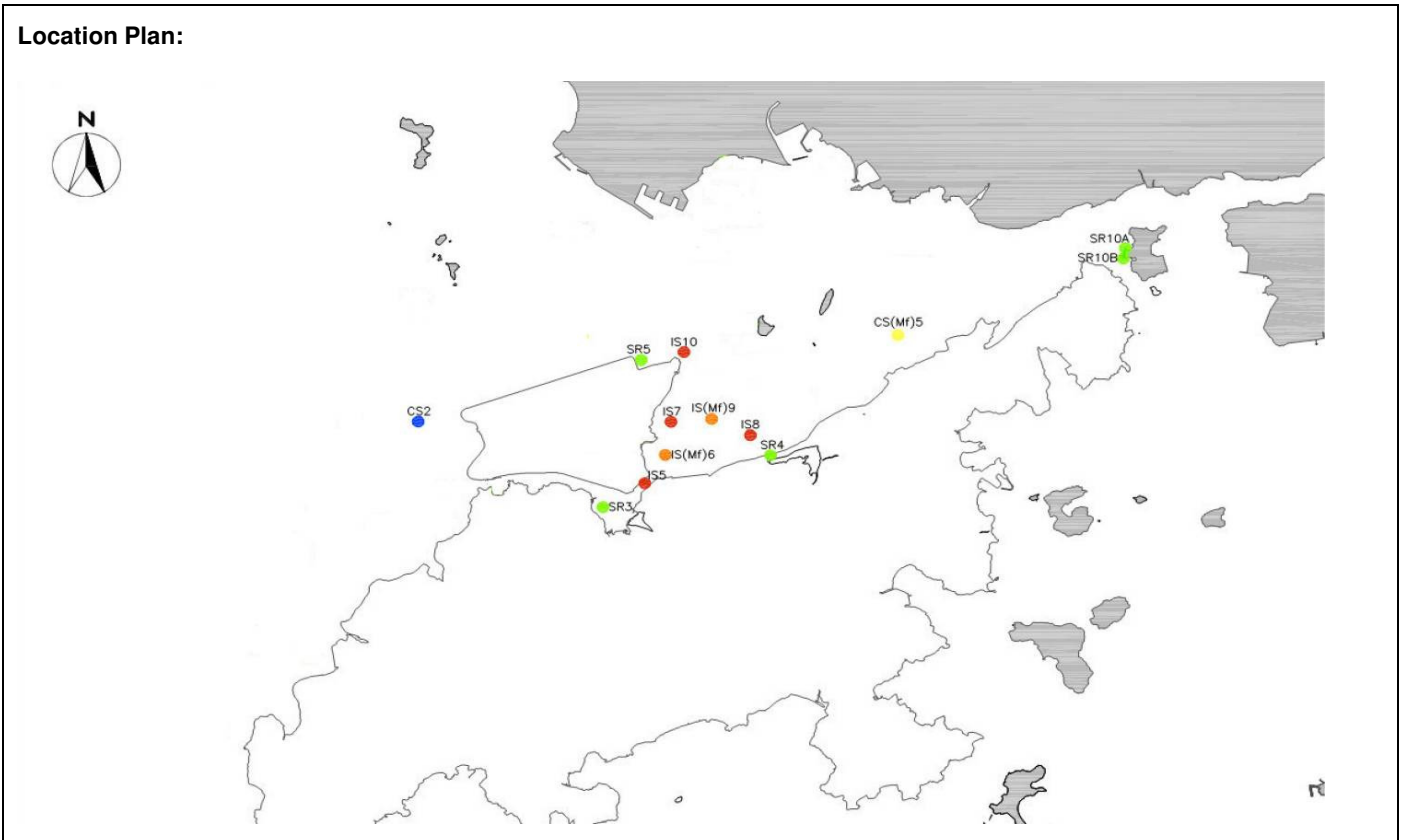
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 8 April 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.: 135

Date of Notification: 8 April 2013

Works Inspected: Data collected from water sampling works on 25 March 2013 and the test report was issued on 5 April 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 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.87 x 120% = 5.8 mg/L for mid ebb) AND CS(Mf)5: 2.60 x 120% = 3.1 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: 4.87 x 130% = 6.3 mg/L for mid ebb) AND CS(Mf)5: 2.60 x 130% = 3.4 mg/L for mid flood)	15.6	28.9

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 25 March 2013, an AL exceedance at station IS7 was recorded during mid-flood tide.

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

1. Installation of stone column on stone platform was carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station IS7 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

The measured value at station IS7 was within the range of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

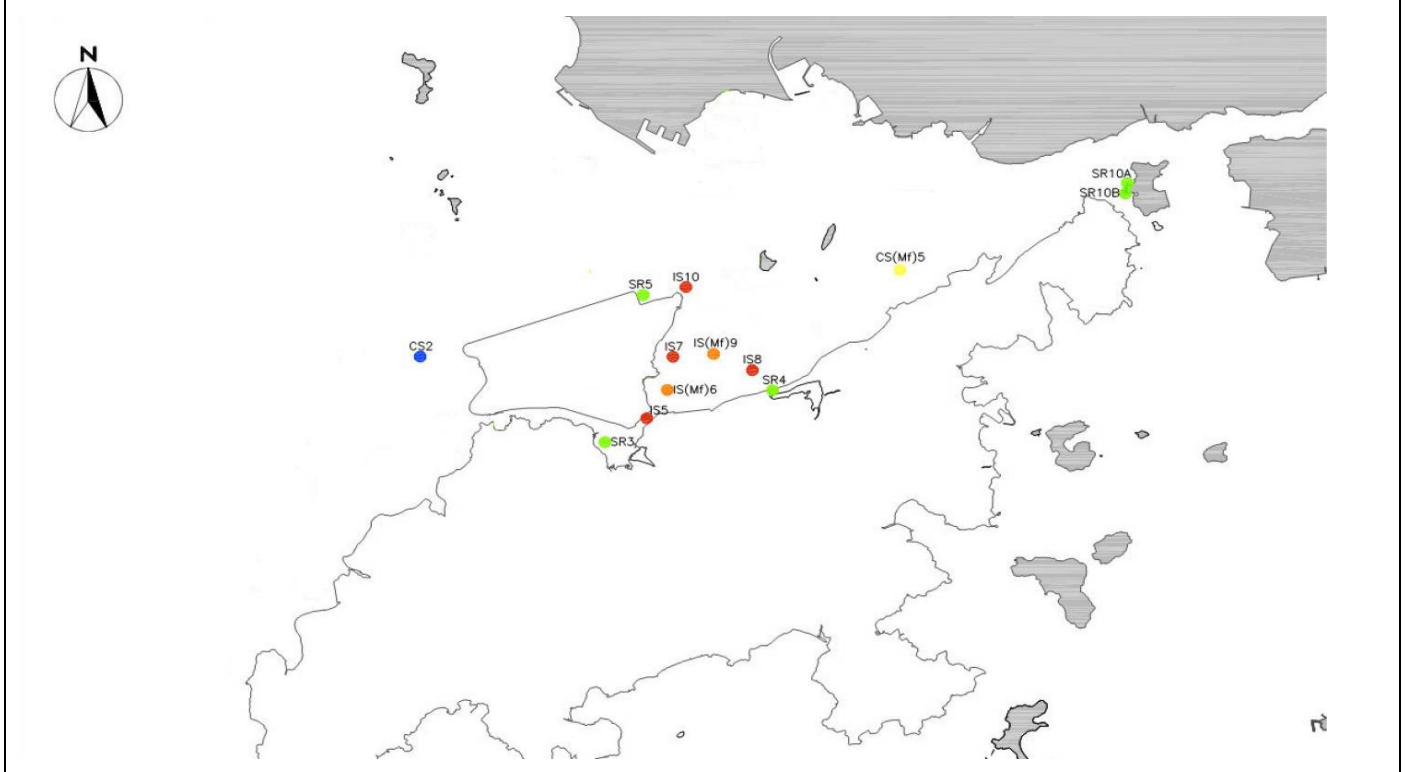
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 : 8 April 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.: 136

Date of Notification: 15 April 2013

Works Inspected: Data collected from water sampling works on 29 March 2013 and the test report was issued on 10 April 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)9	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 7.62 x 120% = 9.1 mg/L for mid ebb) AND CS(Mf)5: 4.25 x 120% = 5.1 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: 7.62 x 130% = 9.9 mg/L for mid ebb) AND CS(Mf)5: 4.25 x 130% = 5.5 mg/L for mid flood)	27.3	14.1
SS	SR5	DA			7.7	<u>34.9</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 29 March 2013, an AL exceedance at station IS(Mf)9 was recorded during mid-ebb tide. An LL exceedance at station 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 reasons:

- Marine construction activities including rock filling, rock transfer and removal of temporary stone platform were carried within silt curtain (Zone 3A) as recommended in the EIA Report during the monitoring period.
- The ranges of suspended solid at stations IS(Mf)9 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
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 value at station IS(Mf)9 is higher than the range of suspended solid during the mid-ebb tide and the measured value at station SR5 is also higher than the range of suspended solid during the mid-flood tide.

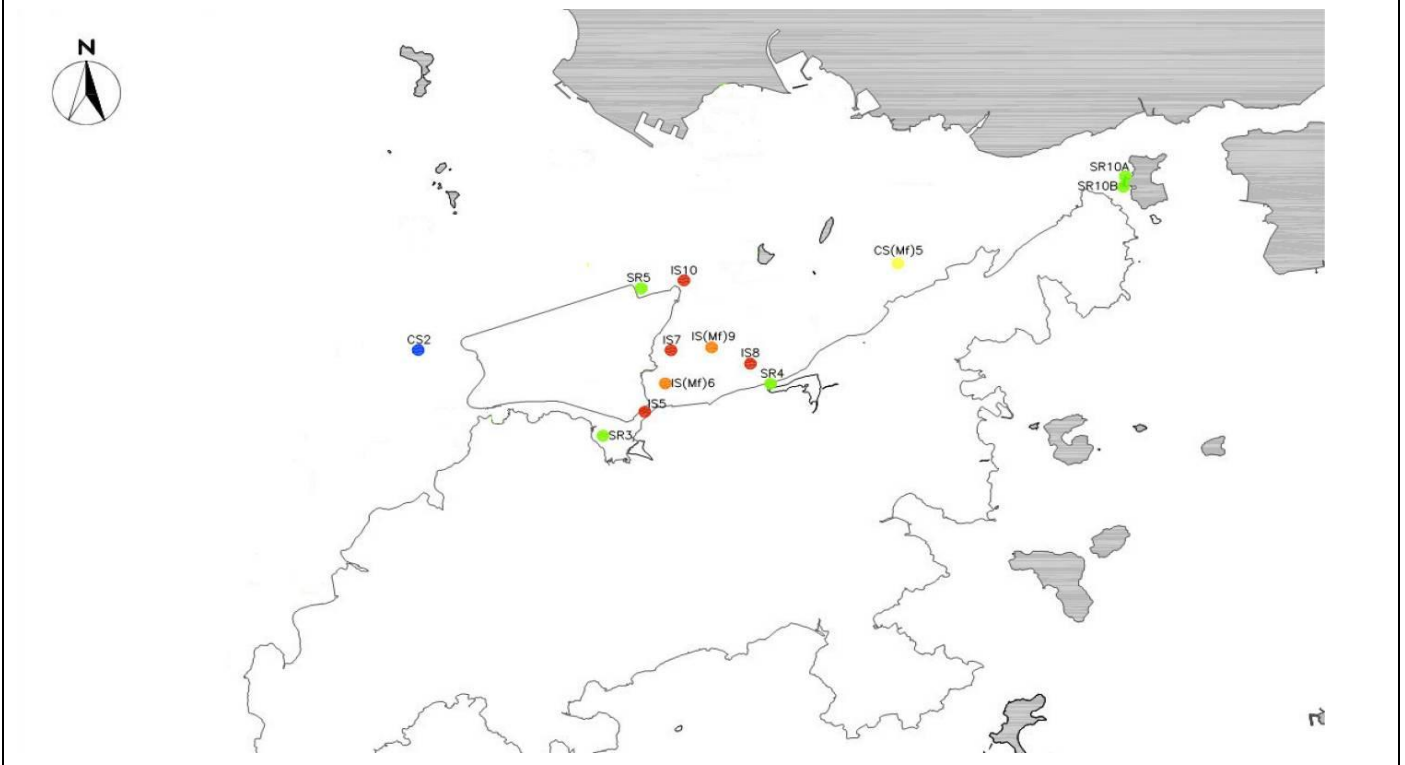
- For mid-ebb tide, Station IS7 is located closer to the works area of Contact No. HY/2011/03 when compared to IS(Mf)9. For mid-flood tide, Station IS5 is located closer to the works area of Contact No. HY/2011/03 when compared to SR5. Monitoring stations IS7 and IS5 are more representative compared to monitoring stations IS(Mf)9 and SR5 when studying the water quality impact caused by Contact No. HY/2011/03. For both IS7 and IS5, the SS levels complied with the AL and LL.
- According to the monitoring results of 1 April 2013, the measured suspended levels complied with the AL and LL at IS(Mf)9 and SR5. In addition, the measured suspended levels at all other monitoring stations complied with AL and LL.
- 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 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 : 15 April 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.: 137 (ver1)

Date of Notification: 22 April 2013

Works Inspected: Data collected from water sampling works on 10 April 2013 and the test report was issued on 17 April 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	IS8	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 8.78 x 120% = 10.5 mg/L for mid ebb) AND CS(Mf)5: 4.45 x 120% = 5.3 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: 8.78 x 130% = 11.4 mg/L for mid ebb) AND CS(Mf)5: 4.45 x 130% = 5.8 mg/L for mid flood)	6.4	23.9

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 10 April 2013, an AL exceedance at station IS8 was recorded during mid-flood tide.

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

- The sampling time for IS8 was around 06:54 hour for mid-flood tide on 10 April 2013. According to the information provided by the Contractor, a tug boat was used to tow barges during the sampling date and a hopper barge was used to carry out rock filling at Zone 3A from 11:00 to 11:45 hour on 10 April 2013. No marine works were undertaken during the sampling period of IS8 for the mid-flood tide.
- The ranges of suspended solid at station IS8 during the baseline monitoring are shown as below:

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

The measured values at station IS8 were within the range of suspended solid during baseline monitoring for mid-ebb tide and mid-flood tide.

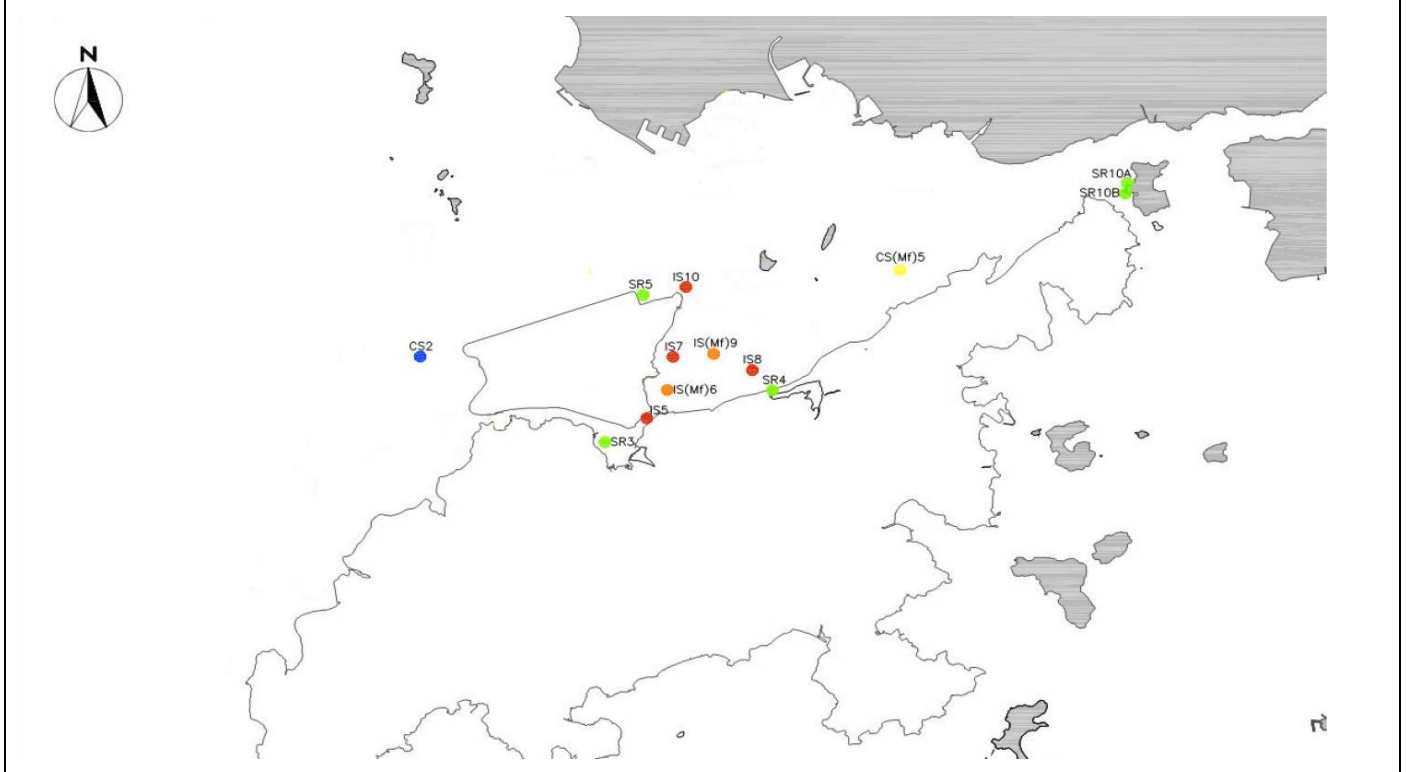
- There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
- No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

As such, the suspended solid 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 : 26 April 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.: 138

Date of Notification: 7 May 2013

Works Inspected: Data collected from water sampling works on 26 April 2013 and the test report was issued on 6 May 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	IS10	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 10.38 x 120% = 12.5 mg/L for mid ebb) AND CS(Mf)5: 5.78 x 120% = 6.9 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: 10.38 x 130% = 13.5 mg/L for mid ebb) AND CS(Mf)5: 5.78 x 130% = 7.5 mg/L for mid flood)	11.3	24.1
SS	SR5	DA	CS2: 10.38 x 120% = 12.5 mg/L for mid ebb) AND CS(Mf)5: 5.78 x 120% = 6.9 mg/L for mid flood)	CS2: 10.38 x 130% = 13.5 mg/L for mid ebb) AND CS(Mf)5: 5.78 x 130% = 7.5 mg/L for mid flood)	11.0	25.8

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 26 April 2013, AL exceedances at station IS10 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 reasons:

1. The sampling time for IS10 and SR 5 were around 06:22 and 06:29 hour for mid-flood tide on 26 April 2013. According to the information provided by the Contractor, removal of temporary stone platform and installation of stone column were carried out on 26 April 2013 during the working hours (after 8am). No marine works were undertaken during the sampling period of IS10 and SR5 for the mid-flood tide.
2. The ranges of suspended solid at station IS10 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
IS10	6.1 to 20.2	7.2 to 16
SR5	6.7 to 16.5	6.5 to 31.2

The measured value at station IS10 is higher than the range of suspended solid during mid-flood tide and the measured value at station SR5 was within the range of suspended solid during baseline monitoring for mid-flood tide.

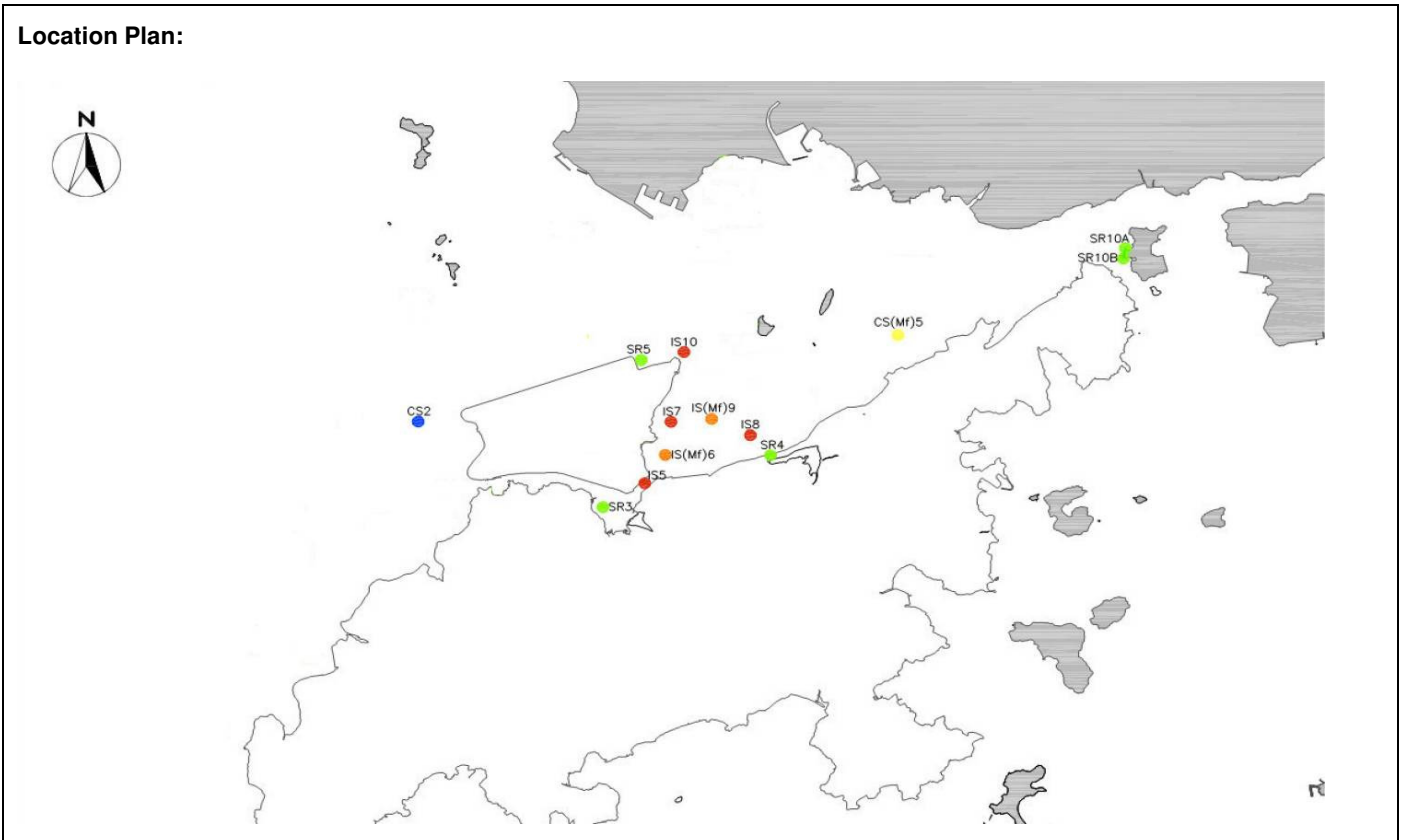
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.

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 May 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.: 139a
Date of Notification: 14 May 2013			
Works Inspected: Not Applicable			
Monitoring Location: Not Applicable			
Parameter: Noise			
Action & Limit Levels		Description	
Time Period	Action Level	Limit Level	2 Action level exceedances were recorded due to 1 documented complaint received - A facsimile complaint was received on 15 April 2013 regarding the machinery noise generated from the construction site near Tung Chung Development Pier operating for the Hong Kong-Zhuhai-Macao Bridge Hong Kong during the normal working hours on 6 April 2013 and 13 April 2013 causing nuisance to public.
07:00–19:00 hrs Normal weekday	1 complaint	75 dB(A)	
Possible reason for Action or Limit Level Non-compliance:			
<p>According to the site diary provided by the Contractor, stone column installation was undertaken at Zone 3A and rock filling activities were undertaken at Zone 1 during the normal working hours of 6 April 2013 (7:30a.m. to 6p.m.) where malfunctioning of the bulldozer operating at Zone 3A was recorded and the machine was checked and repaired to resume functional. During the normal working hours (7:30a.m. to 6p.m) of 13 April 2013, stone column installation was undertaken at Zone 3A and rock filling activities were undertaken at Zones 1 and 3A. The construction activities did not cause adverse noise impacts on nearby noise sensitive receivers. The site diary for the complaint time period of 6 and 13 April 2013 is attached for information.</p>			
Actions taken/ to be taken:			
<p>A site inspection was undertaken on 17 April 2013 between 9:30 a.m. and noon. During the site inspection, the following activities were undertaken:</p> <ul style="list-style-type: none"> • Zone 3A – Rock transfer from pelican barge to hopper barge • Zone 3A – Stone column installation • Zone 3B – Forming access at rock platform by excavator and dump trucks <p>It was found that powered mechanical equipment was operated under normal condition and no significant noise was generated from the construction activities.</p> <p>Based on the Contractor's site diary and our investigation, it is considered that the complaint is invalid.</p>			
Recommendations/ mitigation measures/ actions if necessary:			
<p>Although the noise complaint was considered invalid, the Contractor was also reminded to minimize the noise impact and implement the noise mitigation measures as required in the Implementation Schedule to minimize the potential noise impacts.</p>			

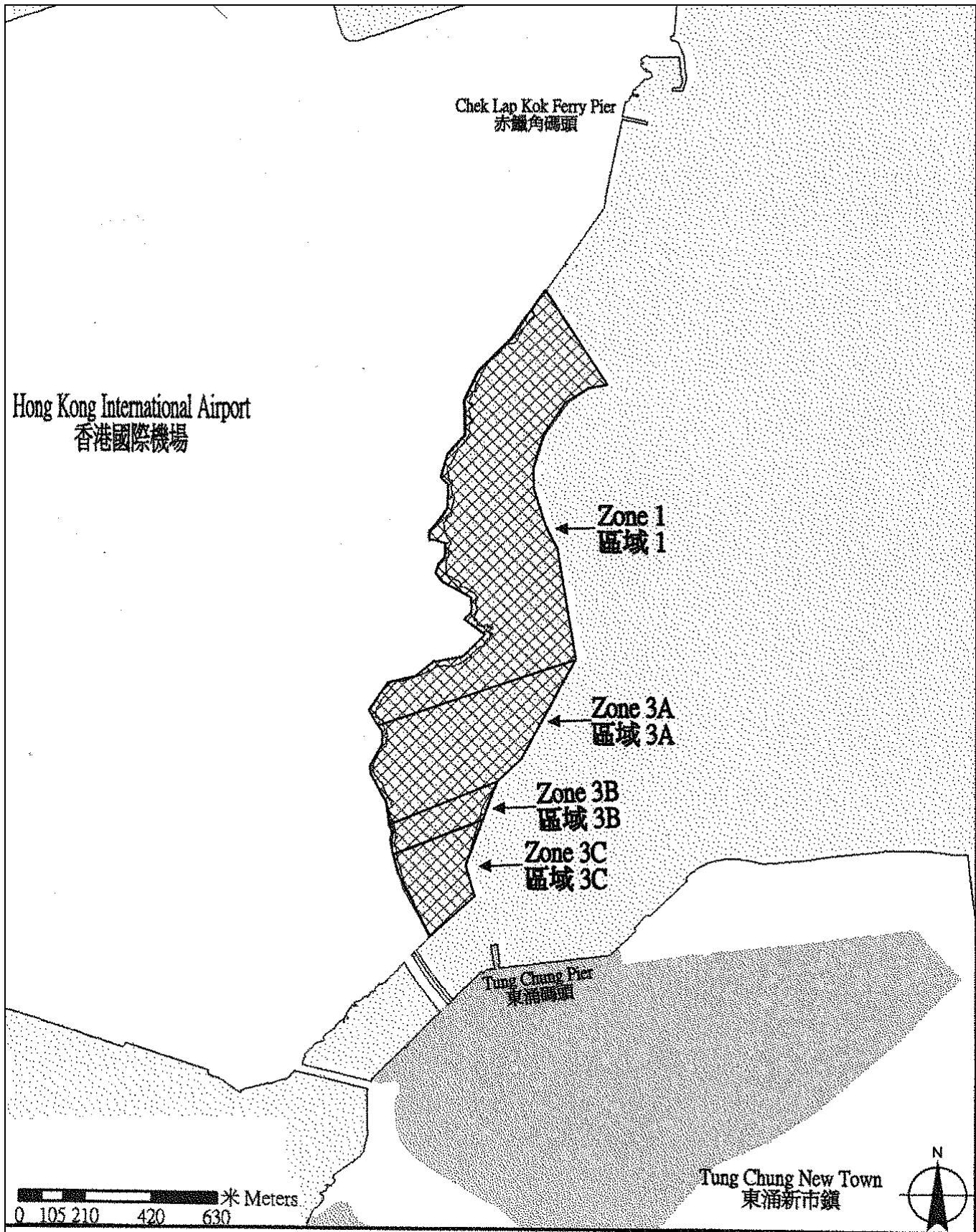
Reviewed by : Claudine Lee

Title : ET Leader



Date : 14 May 2013

Copied to : Supervising Officer, IEC, EPD, Contractor



Marine Plant Operation during normal working hours on 6 Apr 2013

Location	Time	Plant Name	Vessel Type	Working Status	CNP No.	Group
Zone 3A	0730 - 1800	N/A	Stone column rig	Stone column installation	N/A	N/A
		N/A	Air compressor	Provided compressed air for the stone column installation	N/A	N/A
		N/A	Generator	Provided power supply for the stone column installation	N/A	N/A
		N/A	Loader	Feeding rock material for stone column rig	N/A	N/A
		N/A	Bulldozer	Moving rock material to location for use by loader Sudden mechanical breakdown at 0930 and stopped operation for inspection and maintenance	N/A	N/A
Zone 1	1000 - 1800	盛業FB101	Flat top barge	Acting as marker pontoon at fix position	N/A	N/A
		C.M.118	Hopper barge	Rockfilling		

Marine Plant Operation during normal working hours on 13 Apr 2013

Location	Time	Plant Name	Plant Type	Working Status	CNP No.	Group
Zone 3A	0730 - 1900	N/A	Stone column rig	Stone column installation	N/A	N/A
		N/A	Air compressor	Provided compressed air for the stone column installation	N/A	N/A
		N/A	Generator	Provided power supply for the stone column installation	N/A	N/A
		N/A	Loader	Feeding rock material for stone column rig	N/A	N/A
		N/A	Bulldozer	Moving rock material to location for use by loader	N/A	N/A
Zone 1	1000 - 1800	盛業FB101	Flat top barge	Acting as marker pontoon at fix position	N/A	N/A
		C.M.118	Hopper barge	Rockfilling For positioning only without crane operation		
Zone 3A	0800 - 1200	新訊SS2	Derrick barge		N/A	N/A
		C.S.2001	Hopper barge	Rockfilling		
Zone 1	0900 - 11:00	粵惠州貨3388	Pelican barge	Rockfilling	N/A	N/A
	0900 - 11:00	粵廣州貨1062	Pelican barge	Rockfilling	N/A	N/A
	0800 - 1800	C.M.83 海駁5	Derrick barge Hopper barge	For positioning only without crane operation Rockfilling	N/A	N/A

Date of Notification: 23 May 2013

Works Inspected: Data collected from water sampling works on 8 May 2013 and the test report was issued on 15 May 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 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 9.05 x 120% = 10.9 mg/L for mid ebb) AND CS(Mf)5: 5.77 x 120% = 6.9 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: 9.05 x 130% = 11.8 mg/L for mid ebb) AND CS(Mf)5: 5.77 x 130% = 7.5 mg/L for mid flood)	15.1	<u>36.8</u>
SS	IS7	DA			10.7	30.4
SS	IS8	DA			9.4	27.8
SS	IS(Mf)9	DA			25.8	22.9

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 8 May 2013, an AL exceedance at station IS(Mf)9 was recorded during mid-ebb tide. AL exceedances at stations IS7 and IS8, and a LL exceedance at station IS(Mf)6 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:

1. Installation of stone column which is a land-based construction activity was carried out at Zone 1 and Zone 3A on 8 May 2013. There were no marine construction activities on 8 May 2013.
2. The ranges of suspended solid at station IS(Mf)6, IS7, IS8 and 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)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

The measured value at stations IS7 and IS8 were within the range of suspended solid during baseline monitoring for mid-flood tide.

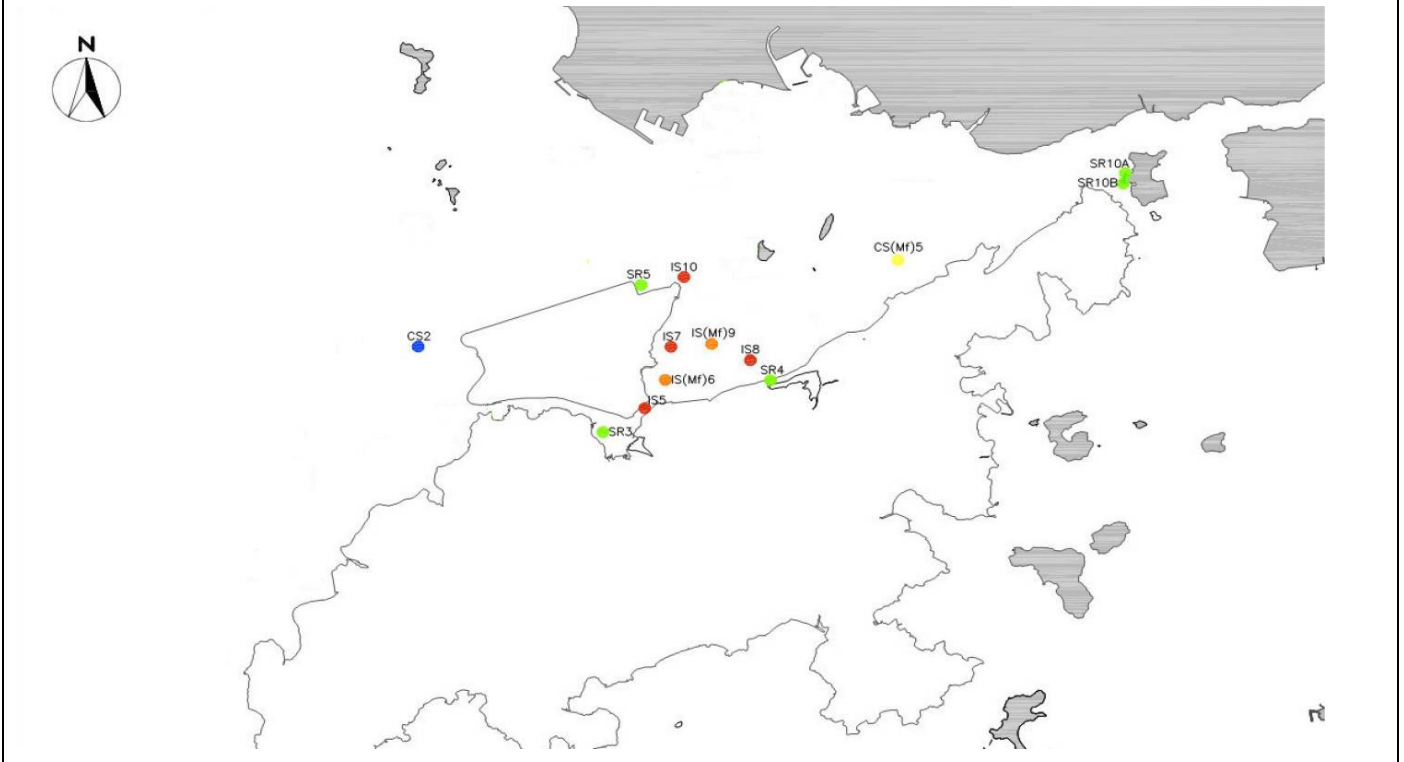
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
4. No leakage of turbid water or any abnormality or malpractice was observed during the sampling exercise.


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 : 23 May 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.: 141
Date of Notification: 4 June 2013			
Works Inspected: Not Applicable			
Monitoring Location: Not Applicable			
Parameter: Noise			
Action & Limit Levels		Description	
Time Period	Action Level	Limit Level	One Action Level exceedance was recorded as there was a noise complaint received on 23 May 2013. The complaint was related to noise generated from dropping metal parts on numerous occasion on the pier opposite Le Blau Deux at around 08:45 to 10:00 hrs of 18 May 2013 and loading/unloading activities creating noise disturbance by the contractor of HY/2011/03.
07:00–19:00 hrs Normal weekday	1 complaint	75 dB(A)	
Possible reason for Action or Limit Level Non-compliance: According to the site dairy provided by the Contractor, no works were carried out on the barge near seawall at the works area near the site office (Work area WA6) from 08:00 to 12:00 hrs of 18 May 2013. Therefore, it is considered that the noise complaint was not project related. The site diary for the complaint time period of 18 May 2013 and location plan of work area WA6 are attached for information.			
Actions taken/ to be taken: As the complaint is not due to the project works, no mitigation measure/actions are considered necessary.			
Recommendations/ mitigation measures/ actions if necessary: If there are metal handling works, the Contractor will not carry out the metal handling works in early morning in order to minimize potential noise disturbance as far as practicable in future.			

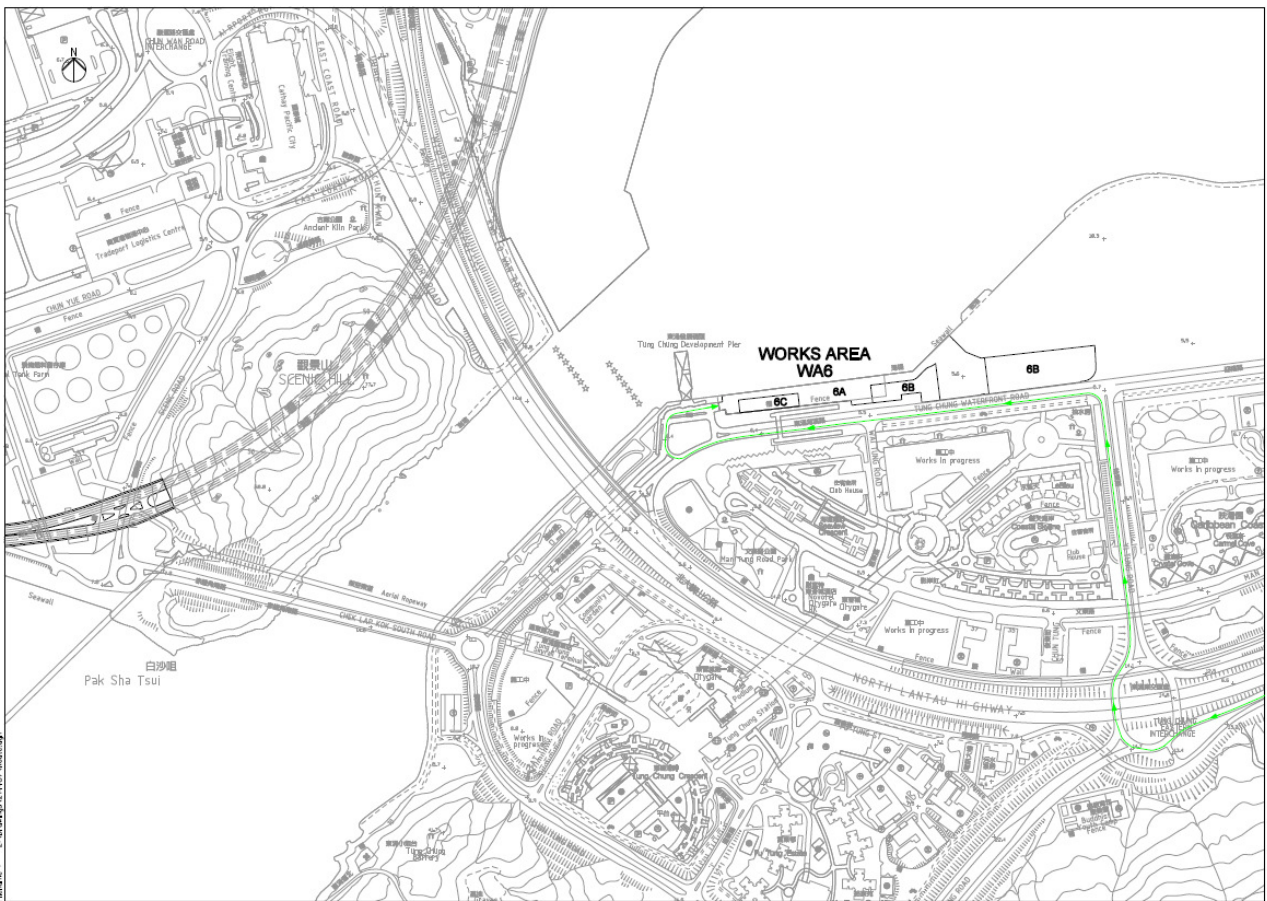
Reviewed by : Claudine Lee Title : ET Leader



Date : 4 June 2013

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

Location Plan:



Drawn by: 2015/2012
2015/2012/2015/2012/2015/2012/2015/2012

Site Diary for WA6 (Works Area of Site Office) on 18 May 2013

<u>Location</u>	<u>Time</u>	<u>Plant Name</u>	<u>Plant Type</u>	<u>Working Status</u>	<u>CNP No.</u>	<u>Group</u>
WA6	0800 - 1200	N/A	N/A	No undertaking of works by barge near seawall at WA6	N/A	N/A

**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.: 142

Date of Notification: 21 August 2013

Works Inspected: Not Applicable

Monitoring Location: NEL & NWL

Parameter: Ecology (Chinese White Dolphin Monitoring)

Action & Limit Levels		Monitoring Results
	North Lantau Social Cluster	
	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 = 7.75; ANI = 24.23

Notes:

1. STG means quarterly encounter rate of number of dolphin sightings.
2. ANI means quarterly encounter rate of total number of dolphins.
3. 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.
4. ***Bold Italic*** means AL exceedances.
5. ***Bold Italic with underline*** means LL exceedances

Possible reason for Action Level Non-compliance:

The possible reasons for Action Level non-compliance could be due to the seasonal fluctuation of dolphin occurrence in spring months in the Northeast Lantau region. According to AFCD long-term monitoring data, dolphins were infrequently sighted in NEL during spring months as compared to the other three seasons, and the current AL non-compliance also occurred in NEL during spring months.

There is no evidence showing the current AL non-compliance directly related to the construction works of HKLR03. 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 inform IEC, ENPO SOR and Contractor via email on 4 June 2013.

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 (third quarter of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.0858 and 0.0931 respectively. If the alpha value is set at 0.1 (due to the small sample size with lower statistical power in the analysis), significant difference was detected between the baseline and present quarters.

For the comparison between the baseline period and the cumulative quarters in impact phase (i.e. first three quarters of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.1336 and 0.0507 respectively. If the alpha value is set at 0.1, significant difference is detected in the average dolphin encounter rate of ANI (i.e. between the two periods and the locations), but not in the average dolphin encounter rate of STG.

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-May 2013 has been reviewed by the dolphin specialist, and no dolphin sighting was made with 66.04 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 2013 in NEL is accurate.

Identify source(s) of impact:

There is no evidence showing that the sources of impact were 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. In order to minimise disturbance to the Brother's Island, the Contractor 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



Date : 21 August 2013

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

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