

**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.: 246s ver 1

Date of Notification: 20 October 2017

Works Inspected: Data collected from water sampling works on 16 October 2017 and the results were issued on 20 October 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: ~~Dissolved Oxygen (DO)~~/ Suspended Solid (SS)/ ~~Turbidity (TURB)~~

Action & Limit Level (AL & LL) / Measured Level:

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID-EBB TIDE (mg/L)	MEASURED AT MID-FLOOD TIDE (mg/L)
SS	IS(Mf)6	DA	<p>23.5 and 120% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 16.18 x 120% = 19.4 for mid ebb AND CS(Mf)5: 16.78 x 120% = 20.1 for mid flood)</p>	<p>34.4 and 130% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 16.18 x 130% = 21.0 for mid ebb AND CS(Mf)5: 16.78 x 130% = 21.8 for mid flood)</p>	25.2	6.6

Notes:

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

Possible reasons for Action Level Non-compliance:

On 16 October 2017, an Action Level exceedance of suspended solid was recorded at station IS(Mf)6 during mid-ebb tide. The exceedance has been investigated and is considered unlikely to be related to the contract works due to the following reasons:

1. Removal of surcharge at Zone 1; box culvert construction at Zone 2; road and drainage construction at Zones 1 and 2; seawall construction at Zones 2 and 3; and transportation of fill material at Zone 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station IS(Mf)6 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	
	7.1	to 19	8.5	to 35
IS(Mf)6	7.1	to 19	8.5	to 35

The measured value for mid-ebb tide at station IS(Mf)6 was above the range of suspended solid for mid-ebb tide during baseline monitoring.

3. There was turbid water observed at station IS(Mf)6 during sampling exercise. However, there was no marine transportation at Zones 1, 2, and 3 during sampling period. No abnormality or malpractice for the contract works was observed during the sampling exercise.
4. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. As such, the exceedance of suspended solid level is considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

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

Date of Notification: 31 October 2017

Works Inspected: Data collected from water sampling works on 20 October 2017 and the results were issued on 28 October 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: ~~Dissolved Oxygen (DO)~~ / Suspended Solid (SS) / ~~Turbidity (TURB)~~

Action & Limit Level (AL & LL) / Measured Level:

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID-EBB TIDE (mg/L)	MEASURED AT MID-FLOOD TIDE (mg/L)
SS	SR5(N)	DA	23.5 and 120% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 17.8 x 120% = 21.4 for mid ebb AND CS(Mf)5: 17.1 x 120% = 20.5 for mid flood)	34.4 and 130% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 17.8 x 130% = 23.1 for mid ebb AND CS(Mf)5: 17.1 x 130% = 22.2 for mid flood)	9.8	27.6

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

Possible reasons for Action Level Non-compliance:

On 20 October 2017, an Action Level exceedance of suspended solid was recorded at station SR5(N) during mid-flood tide. The exceedance has been investigated and is considered unlikely to be related to the contract works due to the following reasons:

1. Removal of surcharge at Zone 1; road and drainage construction at Zones 1 and 2; seawall construction at Zones 1, 2 and 3; box culvert construction at Zone 2; and transportation of fill material at Zone 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station 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	
	min	max	min	max
SR5	6.7	16.5	6.5	31.2

The measured value for mid-flood tide at station SR5(N) was within the range of suspended solid for mid-flood tide during baseline monitoring.

3. There was turbid water observed at station SR5(N) during sampling exercise. However, there was no marine transportation at Zones 1, 2, and 3 during sampling period. No abnormality or malpractice for the contract works was observed during the sampling exercise.
4. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. As such, the exceedance of suspended solid level is considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

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

Date of Notification: 6 November 2017

Works Inspected: Data collected from water sampling works on 30 October 2017 and the results were issued on 6 November 2017

Monitoring Location: Water Quality Monitoring Station

Parameter: ~~Dissolved Oxygen (DO)~~/ Suspended Solid (SS)/ ~~Turbidity (TURB)~~

Action & Limit Level (AL & LL) / Measured Level:

PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID-EBB TIDE (mg/L)	MEASURED AT MID-FLOOD TIDE (mg/L)
SS	IS8	DA	23.5 and 120% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 6.35 x 120% = 7.6 for mid ebb AND CS(Mf)5: 14.43 x 120% = 17.3 for mid flood)	34.4 and 130% of upstream control station's suspended solids at the same tide of the same day (i.e. CS2: 6.35 x 130% = 8.3 for mid ebb AND CS(Mf)5: 14.43 x 130% = 18.8 for mid flood)	24.7	15.5

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

Possible reasons for Action Level Non-compliance:

On 30 October 2017, an Action Level exceedance of suspended solid was recorded at station IS8 during mid-ebb tide. The exceedance has been investigated and is considered unlikely to be related to the contract works due to the following reasons:

1. Removal of surcharge, road and drainage construction at Zone 1; box culvert construction, road and drainage construction at Zone 2; seawall construction at Zones 1, 2 and 3; and transportation of fill material at Zone 3 were carried out within the properly deployed silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at station IS8 during the baseline monitoring are shown as below:

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

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

3. There was turbid water observed at station IS8 during sampling exercise. However, there was no marine transportation at Zones 1, 2, and 3 during sampling period. No abnormality or malpractice for the contract works was observed during the sampling exercise.
4. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. As such, the exceedance of suspended solid level is considered to be attributed to other external factors such as sea condition, rather than the contract works.

Actions taken/ to be taken:

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

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