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.: 223 ver 3

Date of Notification: 16 February 2016

Works Inspected: Data collected from water sampling works on 5 February 2016 and the results were issued on 11 February

2016

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	IS8	DA	27.5 and 120% of upstream control station's turbidity at the same tide of the same day	47.0 and 130% of upstream control station's turbidity at the same tide of the same day	8.2	<u>74.2</u>
TURB	SR4	DA	(i.e. CS2: 1.72 x 120% = <b>2.1</b> for mid ebb AND CS(Mf)5: 1.65 x 120% = <b>2.0</b> for mid flood)	(i.e. CS2: 1.72 x 130% = <b>2.2</b> for mid ebb AND CS(Mf)5: 1.65 x 130% = <b>2.1</b> for mid flood)	9.5	<u>58.4</u>

Notes:

DA means depth average.

Bold Italic means AL exceedances.

**Bold Italic with underline** means LL exceedances.

## Possible reason for Limit Level Non-compliance:

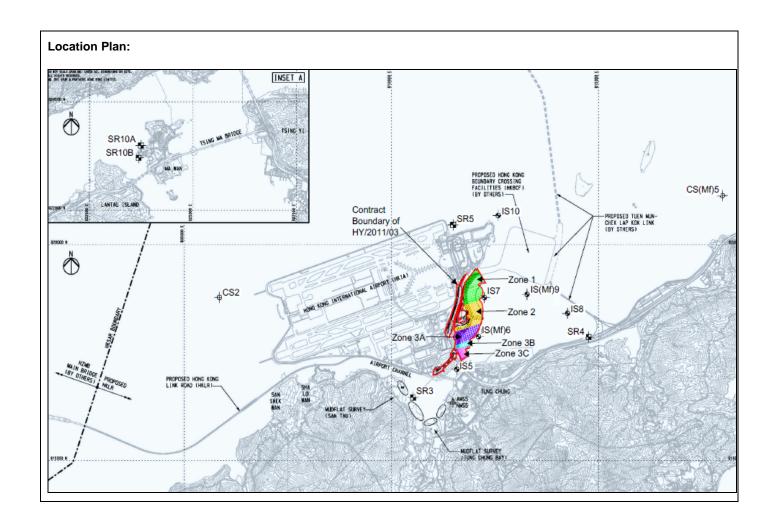
On 5 February 2016, Limit Level exceedances of turbidity were recorded at stations IS8 and SR4 during mid-flood tide. The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

- Box culvert construction works at Zones 1 and 2 and seawall construction works at Zones 2 and 3A were carried out
  within silt curtain as recommended in the EIA Report. According to the Contractor, the wastewater effluent generated
  from the contract works was treated before discharging into water bodies (e.g. storm water drains, coast and sea etc.)
  on 5 February 2016 in accordance with the discharge licence.
- 2. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. No marine works was conducted near monitoring stations IS8 and SR4 which are located outside the site boundary of HKLR03 Contract. Also, there was no marine transportation of fill materials/sediment on 5 February 2016 and no muddy plume observed at IS8 and SR4 during sampling exercise.
- 3. No leakage of turbid water or any abnormity or malpractice for all contract works was observed during the sampling exercise.

As such, the exceedances of 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. However, the Contractor is reminded to ensure that the silt curtain shall be fully maintained throughout the construction works and construction works shall be carried out under stringent supervision to prevent any water quality impacts to the seawater.



Reviewed by : Claudine Lee Title : ET Leader

Date : 11 March 2016

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.: 224 ver 3

Date of Notification: 18 February 2016

Works Inspected: Data collected from water sampling works on 5 February 2016 and the results were issued on 17 February

2016

Monitoring Location: Water Quality Monitoring Stations

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	34.4 and 130% of upstream control station's suspended solids at the same tide of the same day	5.1	25.3
SS	SR4	DA	(i.e. CS2: 3.5 x 120% = <b>4.2</b> for mid ebb AND CS(Mf)5: 3.33x 120% = <b>4.0</b> for mid flood)	(i.e. CS2: 3.5 x 130% = <b>4.6</b> for mid ebb AND CS(Mf)5: 3.33 x 130% = <b>4.3</b> for mid flood)	5.2	<u>36.9</u>

Notes:

DA means depth average.

Bold Italic means AL exceedances.

**Bold Italic with underline** means LL exceedances.

# Possible reason for Action and Limit Level Non-compliance:

On 5 February 2016, an Action Level exceedance of suspended solid was recorded at station IS8 and a Limit Level exceedance of suspended solid was recorded at station SR4 during mid-flood tide. The exceedances have been investigated and are considered unlikely to be related to contract works due to the following reasons:

Box culvert construction works at Zones 1 and 2 and seawall construction works at Zones 2 and 3A were carried out
within silt curtain as recommended in the EIA Report. According to the Contractor, the wastewater effluent generated
from the contract works was treated before discharging into water bodies (e.g. storm water drains, coast and sea etc.)
on 5 February 2016 in accordance with the discharge license.

2. The range of suspended solid at stations IS8 and SR4 during the baseline monitoring is 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
SR4	5.3	to	20	5.6	to	24.5

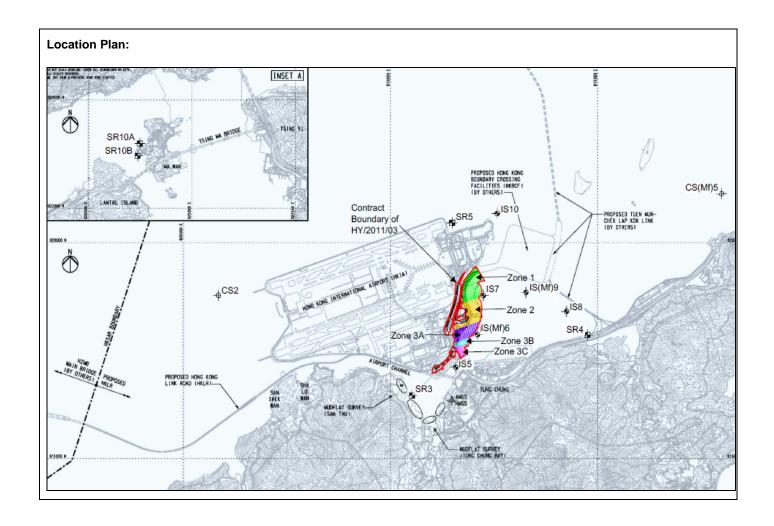
The measured values at station IS8 was below the range of suspended solid for mid-flood tide during baseline monitoring. The measured values at station SR4 were above the range of suspended solid for mid-flood tide during baseline monitoring.

- 3. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results. No marine works was conducted near monitoring stations IS8 and SR4 which are located outside the site boundary of HKLR03 Contract. Also, there was no marine transportation of fill materials/sediment on 5 February 2016 and no muddy plume observed at IS8 and SR4 during sampling exercise.
- 4. No leakage of turbid water or any abnormity or malpractice for all contract works was observed during the sampling exercise.

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



Reviewed by : Claudine Lee Title : ET Leader

Date : 11 March 2016

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

# **Summary of Notifications of Summons and Prosecutions**

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