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

Date of Notification: 4 April 2014

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

Monitoring Location: Water Quality Monitoring Stations

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

Action & Limit Level (AL & LL) / Measured Level: MEASURED AT MID-MEASURED AT MID-PARAM STATION DEPTH AL (mg/L) LL (mg/L)EBB TIDE (mg/L) FLOOD TIDE (mg/L) 23.5 and 120% of 34.4 and 130% of SS IS5 DA 24.3 10.2 upstream control upstream control station's station's suspended solid at suspended solid at the same tide of the same tide of the same day (i.e. the same day (i.e. SS DA 24.4 IS10 14.0 CS2: 10.77 x CS2: 10.77 x 120% = 12.9 mg/L 130% = 14.0 mg/L for mid ebb) AND for mid ebb) AND CS(Mf)5: 9.53 x CS(Mf)5: 9.53 x 120% = **11.4** mg/L 130% = **12.4** mg/L SS SR3 DA 29.2 11.9 for mid flood) for mid flood)

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

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

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

- 1. Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations IS5, IS10 and SR3 during the baseline monitoring are shown as below:

Station	Range of Susper	nded Solid (mg/L)) Mid- Ebb Tide	Range of Suspended Solid (mg/L) Mid- Flood Tid		
IS5	8.1	to	25.7	7	to	23.7
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28

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

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

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

Actions taken/ to be taken:

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

Notification No.. 17

Location Plan:			
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Reviewed by	: Claudine Lee	Title : ET Leader	
	Chan.	Date : 4 April 2014	

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

Date of Notification: 4 April 2014

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

Monitoring Location: Water Quality Monitoring Stations

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

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

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

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

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

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

- 1. Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations IS5, IS(Mf)6, IS10, SR3 and SR5 during the baseline monitoring are shown as below:

Station	Range of Susper	ided Solid (mg/L) Mid- Ebb Tide	Range of Suspe	ended Solid (mg/	L) Mid- Flood Tide
IS5	8.1	to	25.7	7	to	23.7
IS(Mf)6	7.1	to	19	8.5	to	35
IS10	6.1	to	20.2	7.2	to	16
SR3	6.7	to	31	7.6	to	28

Notification No.: 175 ver1

SR5	6.7	to	16.5	6.5	to	31.2	

The measured values at stations IS5, IS(Mf)6 and SR3 for mid-ebb tide and the measured value at station IS10 for midflood tide were above the range of suspended solid during baseline monitoring. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

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

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

Actions taken/ to be taken:

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

Location Plan: SR1 IS/M

Reviewed by : Claudine Lee ET Leader Title : Date: 4 April 2014

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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

Date of Notification: 4 April 2014

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

Monitoring Location: Water Quality Monitoring Stations

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

Action & Limit Level (AL & LL) / Measured Level:										
PARAM	STATION	DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)				
SS	SR5	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 13.68 x 120% = 16.4 mg/L for mid ebb) AND CS(Mf)5: 7.37 x 120% = 8.8 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 13.68 x 130% = 17.8 mg/L for mid ebb) AND CS(Mf)5: 7.37 x 130% = 9.6 mg/L for mid flood)	23.9	15.9				

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

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

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

- 1. Geotextile tube installation, stone column installation and formation of stone platform at Zone 1, formation of seawall, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations SR5 during the baseline monitoring are shown as below:

Station	Range of Suspen	ided Solid (mg/L)) Mid- Ebb Tide	Range of Suspended Solid (mg/L) Mid- Flood Tide		
SR5	6.7	to	16.5	6.5	to	31.2

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

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

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

Actions taken/ to be taken:

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

Notification No.: 176 ver 1

Location Plan:			
N		SR5 1510 SR5	
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Reviewed by	: Claudine Lee	Title : ET Leader	
	Class.	Date : <u>4 April 2014</u>	

Contract No. HY/2011/03 -Hong Kong- Zhuhai- Macao Bridge Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities Notifications of Environmental Quality Limits Exceedances Notification No.: 177

Date of Notification: 11 April 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 20 March 2014 and the test report was issued on 26 March 2014

Monitoring Location: AMS6 - Dragon Air Building (AMS6)

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	<u>AL (μg/m³)</u>	<u>LL (μg/m³)</u>	<u>MEASURED LEVEL, μg/m³</u>
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	190

Notes: Bold Italic means AL exceedance

Bold Italic with underline means LL exceedance

Possible reason for Action or Limit Level Non-compliance:

An Action Level exceedance of 24-hr TSP level was recorded at AMS6, Dragon Air Building, on 20 March 2014.

According to the information provided by the Contractor, the following construction activities were undertaken during the sampling period:

Zone 1

- Geotextile tube installation
- Formation of stone platform
- Rock fill
- Stone column installation

Zone 2

- Transfer of fill material
- Formation of stone platform
- Formation of seawall
- Stone column installation

Zone 3A

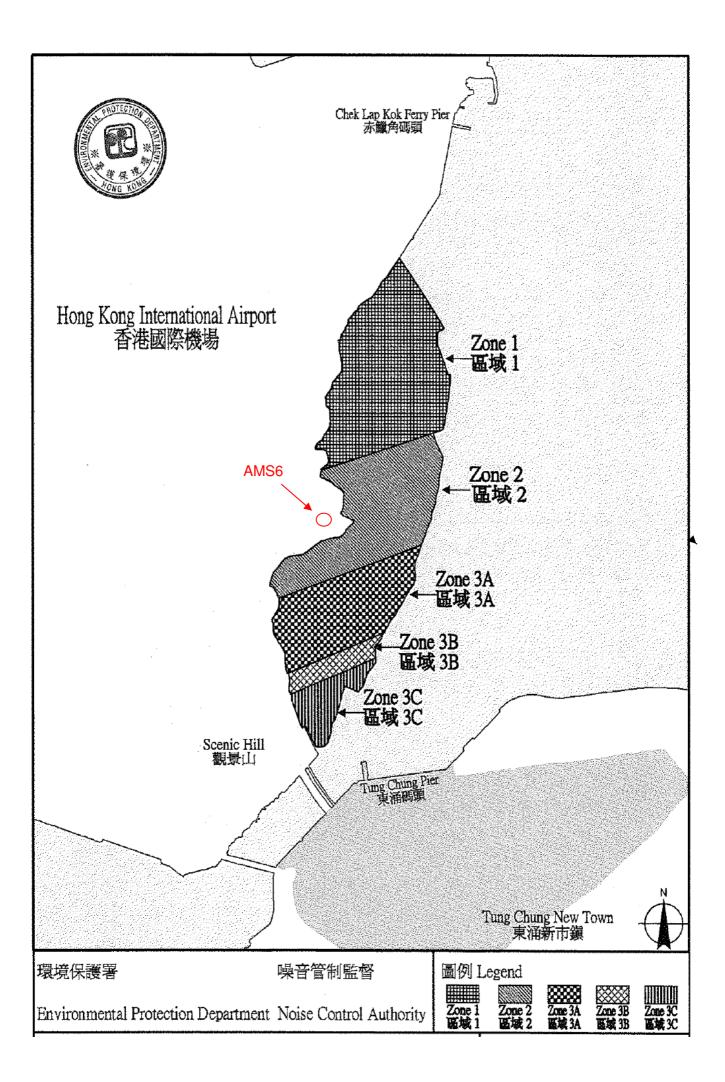
- Transfer of fill material
- Formation of stone platform
- Formation of seawall

The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The Air Quality Health Index (AQHI) recorded by EPD at the Tung Chung station during the sampling time ranged from 3 (low) to 8 (very high). Therefore, it is considered that the exceedance was not related to the construction activities of the Contract and was caused by poor weather condition.

Actions taken/ to be taken:

As the 24-hr TSP exceedance was not related to project works, no immediate actions are considered necessary. However, the Contractor is reminded to suppress potential dust generation during the construction works.

Reviewed by	: Claudine Lee	Title : ET Leader
	Cl	Date : 11 April 2014



Contract No. HY/2011/03 -Hong Kong- Zhuhai- Macao Bridge Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities Notifications of Environmental Quality Limits Exceedances Notification No.: 178

Date of Notification: 11 April 2014

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

Monitoring Location: Water Quality Monitoring Stations

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

Action & Limit Level (AL & LL) / Measured Level:										
PARAM	STATION		DEPTH	AL (mg/L)	LL (mg/L)	MEASURED AT MID- EBB TIDE (mg/L)	MEASURED AT MID- FLOOD TIDE (mg/L)			
SS	IS(Mf)9	S(Mf)9	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.12 x 120% = 4.9 mg/L for mid ebb) AND CS(Mf)5: 2.77x 120% = 3.3 mg/L for mid flood)	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.12 x 130% = 5.4 mg/L for mid ebb) AND CS(Mf)5: 2.77 x 130% = 3.6 mg/L for mid flood)	6.9	26.6			

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

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

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

- 1. Geotextile tube installation, formation of stone platform stone column installation and Rock fill at Zone 1, formation of stone platform and stone column installation at Zone 2 and formation of seawall at Zone 3A were carried out within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at station IS(Mf)9 during the baseline monitoring are shown as below:

Station	Range of Suspen	ided Solid (mg/L)) Mid- Ebb Tide	Range of Suspended Solid (mg/L) Mid- Flood Tide		
IS(Mf)9	5.5	to	20.1	7.3	to	26

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

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

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

Actions taken/ to be taken:

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

Location Plan:			
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Reviewed by	: Claudine Lee	Title : ET Leader	
	Chan.	Date : <u>11 April 2014</u>	

Contract No. HY/2011/03 -Hong Kong- Zhuhai- Macao Bridge Hong Kong Link Road Section between Scenic Hill and Hong Kong Boundary Crossing Facilities Notifications of Environmental Quality Limits Exceedances Notification No.: 179

Date of Notification: 11 April 2014

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

Monitoring Location: Water Quality Monitoring Stations

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

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

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

Notes:

DA means depth average.

Bold Italic means AL exceedances.

<u>Bold Italic with underline</u> means LL exceedances.

Possible reason for Action or Limit Level Non-compliance:

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

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

- 1. Formation of stone platform, Stone column installation and Rock fill at Zone 1 and Formation of stone platform at Zone 2, were carried out within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations IS7, IS(Mf)9 and IS10 during the baseline monitoring are shown as below:

Station	Range of Suspended Solid (mg/L) Mid- Ebb Tide			Range of Suspended Solid (mg/L) Mid- Flood Tide		
IS7	6.1	to	21	7.8	to	34
IS(Mf)9	5.5	to	20.1	7.3	to	26
IS10	6.1	to	20.2	7.2	to	16

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

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

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

Actions taken/ to be taken:

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

Location Plan:		
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Reviewed by	: Claudine Lee Title : ET Leader	
	Date : 11 April 2014	

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	

Summary of Notifications of Summons and Prosecutions