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.: 168 (ver1)

Date of Notification: 12 February 2014

Works Inspected: Data collected from water sampling works on 3 January 2014 and the test report was issued on 10 January

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	SR3	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e.	34.4 and 130% of upstream control station's suspended solid at the same tide of the same day (i.e.	8.4	31.3
SS	SR5	DA		CS2: 7.32 x 130% = <b>9.5</b> mg/L for mid ebb) AND CS(Mf)5: 6.85 x 130% = <b>8.9</b> mg/L for mid flood)	7.8	26.7

Notes:

DA means depth average.

Bold Italic means AL exceedances.

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

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

On 3 January 2014, two AL exceedances at stations 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. Rock filling and sand filling at Zone 1, sand filling, removal of temporary stone platform and stone column works at Zone 2, sand filling and removal of temporary stone platform at Zone 3A were carried within silt curtain as recommended in the EIA Report.

2. The ranges of suspended solid at stations 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		
SR3	6.7	to	31	7.6	to	28
SR5	6.7	to	16.5	6.5	to	31.2

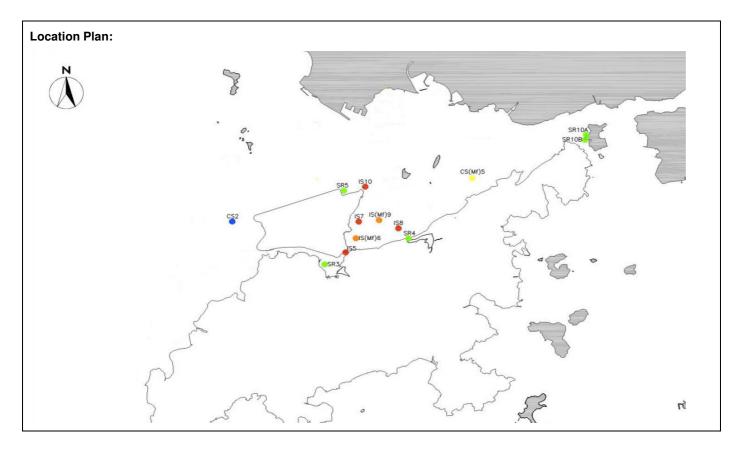
The measured value at station SR5 was within the range of suspended solid during baseline monitoring for mid-flood tide while the measured value at station SR3 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during 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.



Reviewed by : Claudine Lee Title : ET Leader

Date: 12 February 2014

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.: 169 (ver1)

Date of Notification: 12 February 2014

Works Inspected: Data collected from water sampling works on 6 January 2014 and the test report was issued on 10 January

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	DA	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 6.43 x 120% = 7.7 mg/L for mid ebb) AND CS(Mf)5: 7.22 x 120% = 8.7 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: 6.43 x 130% = 8.4 mg/L for mid ebb) AND CS(Mf)5: 7.22 x 130% = 9.4 mg/L for mid flood)	7.2	25.7

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

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

On 6 January 2013, an AL exceedance at station IS(Mf)9 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:

- Sand filling, rock filling and sand pumping at Zone 1, stone column works, levelling of temporary stone platform, removal
  of temporary stone platform and sand filling at Zone 2, sand filling and removal of temporary stone platform at Zone 3A
  were carried within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations IS(Mf)9 during the baseline monitoring are shown as below:

Station	Range of Susp	ended Solid (	mg/L) Mid- Ebb Tide	Range of Susp	pended Solid (m	ng/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 within the range of suspended solid during baseline monitoring for mid-flood tide

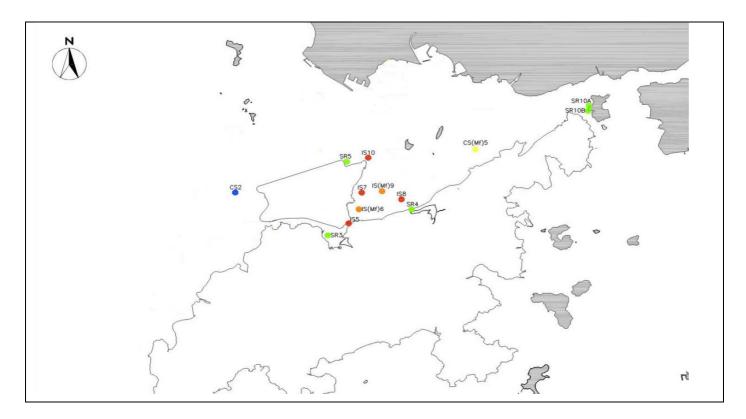
- 3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results
- 4. No leakage of turbid water or any abnormity or malpractice was observed during the sampling exercise.

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:		



Reviewed by : Claudine Lee Title : ET Leader

Date: 12 February 2014

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.: 170

Date of Notification: 4 February 2014

Works Inspected: Data collected from water sampling works on 10 January 2014 and the test report was issued on 17 January

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	23.5 and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 4.65 x 120% = 5.6 mg/L for mid ebb) AND CS(Mf)5: 2.68 x 120% = 3.2 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: 4.65 x 130% = 6.0 mg/L for mid ebb) AND CS(Mf)5: 2.68 x 130% = 3.5 mg/L for mid flood)	6.3	25.7

Notes:

DA means depth average.

Bold Italic means AL exceedances.

Bold Italic with underline means LL exceedances.

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

On 10 January 2013, an AL exceedance at station IS5 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. Sand filling, sand pumping, filling and levelling of stone platform and stone column works at Zone 1, excavation of aggregate for removal of temporary platform at Zone 2, excavation of aggregate for removal of temporary platform and public fill filling at Zone 3A were carried within silt curtain as recommended in the EIA Report.
- 2. The ranges of suspended solid at stations IS5 during the baseline monitoring are shown as below:

Station	Range of Susp	oended Solid (	mg/L) Mid- Ebb Tide	Range of Sus	pended Solid (m	ng/L) Mid- Flood Tide
IS5	8.1	to	25.7	7	to	23.7

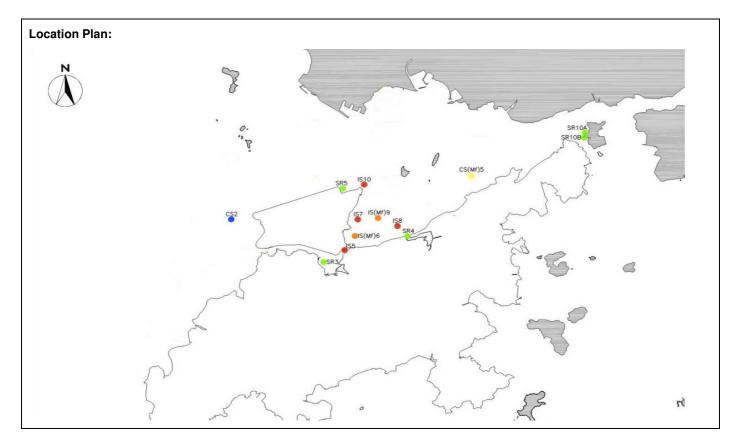
The measured value at station IS5 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.

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.



Reviewed by : Claudine Lee Title : ET Leader

Date: 4 February 2014

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.: 171

Date of Notification: 4 February 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 8 January 2014 and the test report was issued on

17 January 2014

Monitoring Location: AMS6 - Dragon Air Building (AMS6)

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL (μg/m³)	LL (μg/m³)	MEASURED LEVEL, μg/m³
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	187

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 8 January 2014.

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

## Zone 1

- Sand filling
- Filling and leveling of stone platform
- Sand pumping
- Stone column works

## Zone 2

- Excavation of aggregate for removal of temporary platform
- Stone column works

## Zone 3A

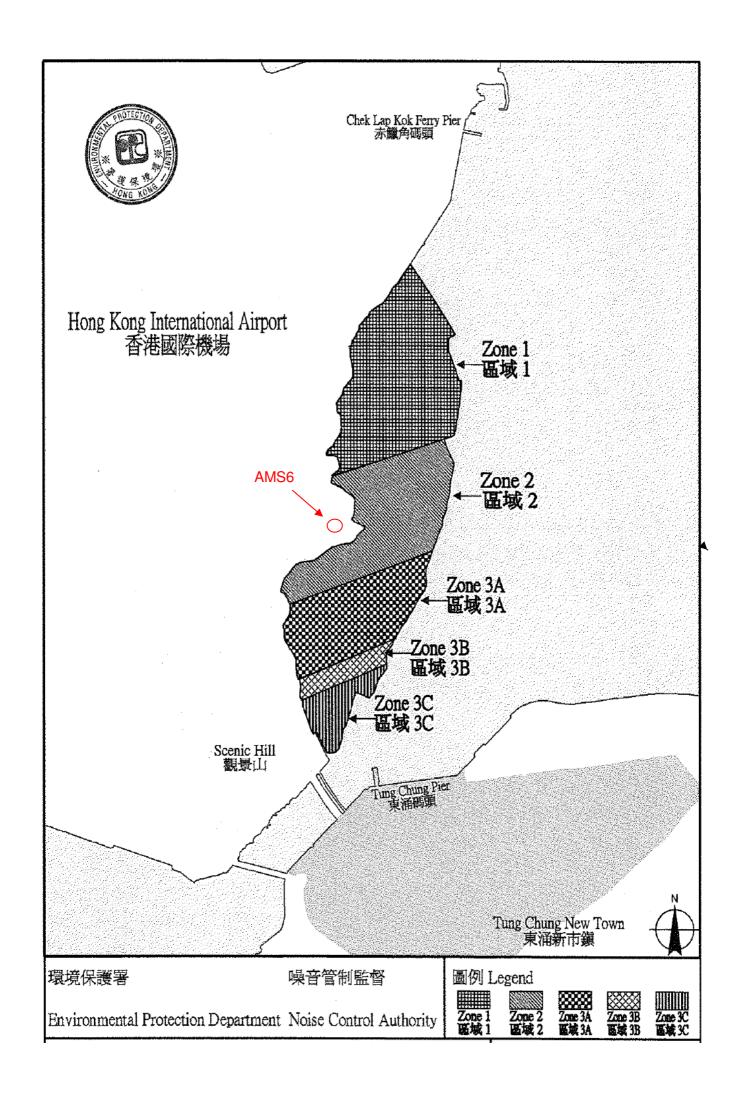
- Sand pumping
- Excavation of aggregate for removal of temporary platform
- Public fill filling

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) o 9 (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
	$\bigcap_{n}$	
		Date: 4 February 2014



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.: 172

Date of Notification: 12 February 2014

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

28 January 2014

Monitoring Location: AMS6 - Dragon Air Building (AMS6)

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL (μg/m³)	LL (μg/m³)	MEASURED LEVEL, μg/m³
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	213

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 January 2014.

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

## Zone 1

- Stone column works
- Construction of stone platform
- Sand filling
- Geotextile tube installation

## Zone 2

Filling and leveling of stone platform

# Zone 3A

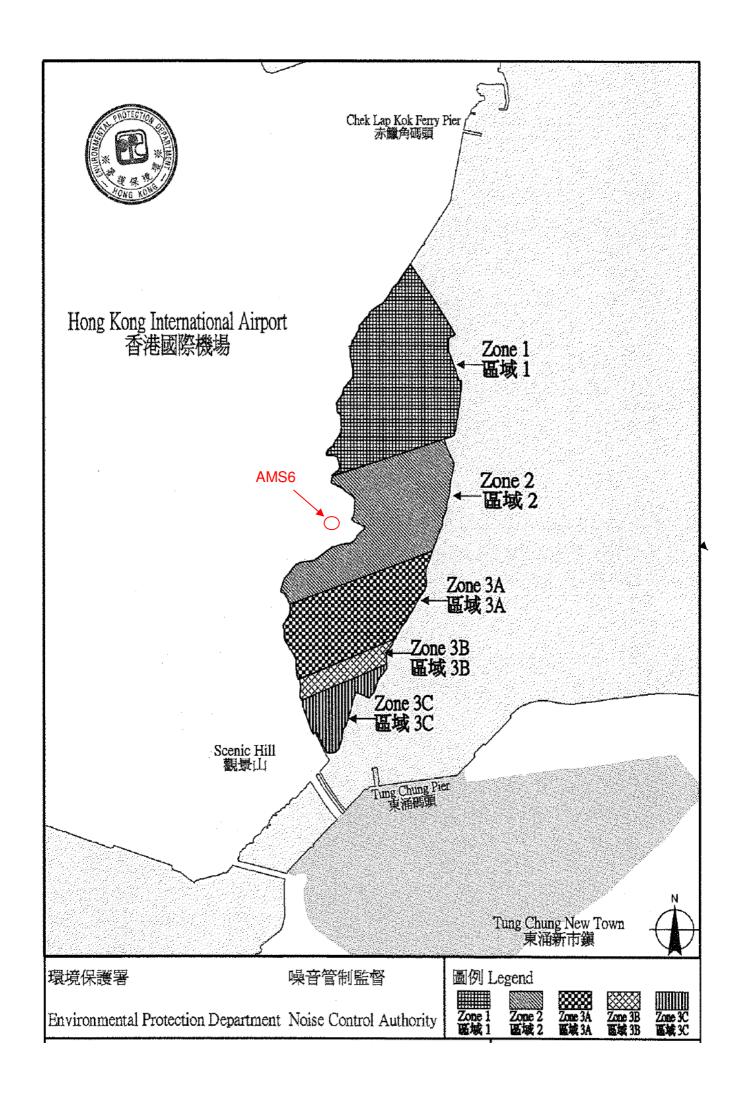
- Public fill filling
- Excavation of aggregate for removal of temporary stone platform for the construction of permanent seawall
- Sand pumping

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 5 (moderate) to 10 (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
		Date:	12 February 2014



# **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