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.: 159

Date of Notification: 23 December 2013

Works Inspected: Data collected from water sampling works on 6 December 2013 and the test report was issued on 13 December 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: 10.32 x 120% = **12.4** mg/L for mid ebb) AND CS(Mf)5: 13.82 x 120% = **16.6** 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: 10.32 x 130% = **13.4** mg/L for mid ebb) AND CS(Mf)5: 13.82 x 130% = **18.0** mg/L for mid flood)	12.1	***26.5***
SS	SR10A	DA			8.2	***<u>34.9</u>***
SS	SR10B	DA			7.7	***24.9***

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 6 December 2013, AL exceedances at stations IS(Mf)6 and SR10B and a LL exceedance at station SR10A 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 filling and stone column installation at Zone 1, stone column installation at Zone 2, sand filling and removal of 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)6, 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		
IS(Mf)6	7.1	to	19	8.5	to	35
SR10A	3.6	to	17	4.8	to	19.2
SR10B	3.1	to	30.8	5.7	to	26.7

The measured value at station IS(Mf)6 and SR10B was within the range of suspended solid during baseline monitoring for mid-flood tide while the measured value at station SR10A 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.

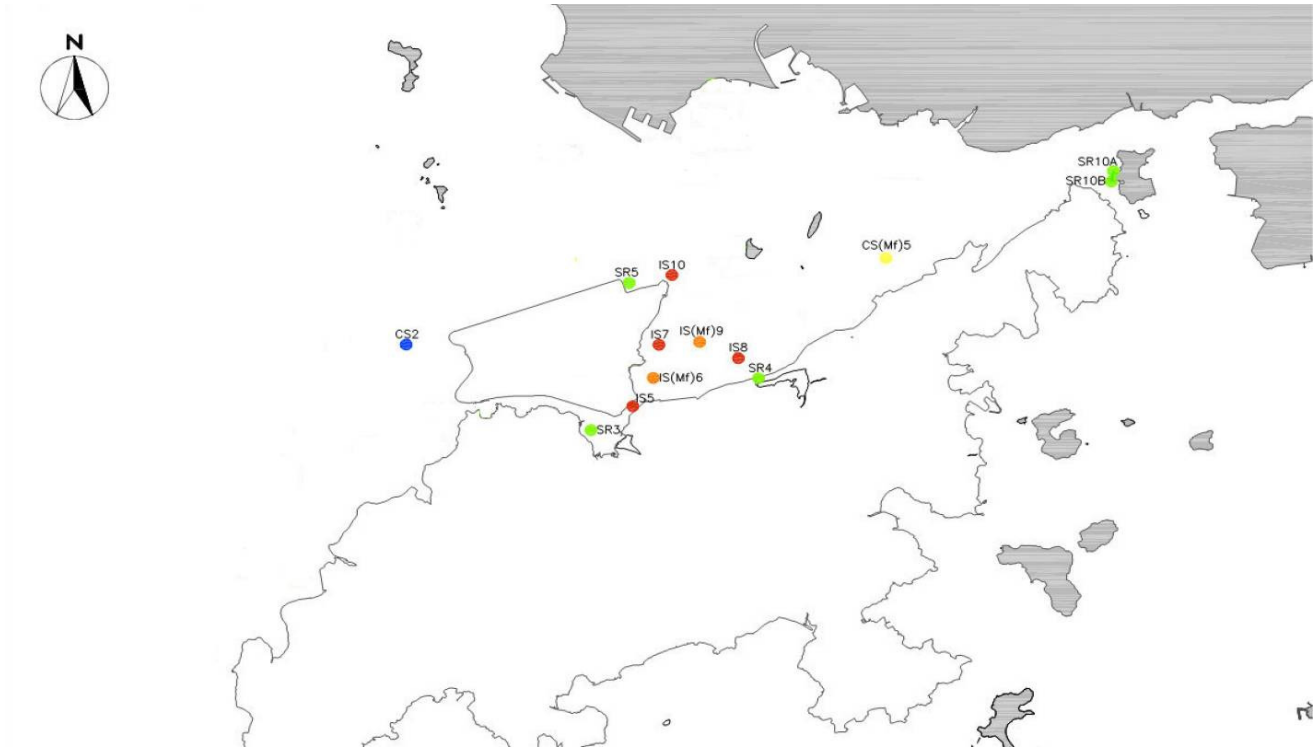
3. No leakage of turbid water or any abnormity or malpractice was observed during the sampling exercise.

As such, the suspended solid 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 December 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.: 160

Date of Notification: 6 January 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 11 December 2013 and the test report was issued on 19 December 2013

Monitoring Location: AMS6 – Dragon Air Building

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL ($\mu g/m^3$)	LL ($\mu g/m^3$)	MEASURED LEVEL, $\mu g/m^3$
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	***224***

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 11 December 2013.

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

Zone 1

- Sand filling
- Aggregate filling for temporary stone platform
- Transfer of fill material
- Stone column works
- Installation of geotextile tubes

Zone 2

- Sand filling
- Stone column works

Zone 3A
- Sand filling
- Public fill filling
- Removal of temporary stone platform
- Transfer of fill material
- Band drain installation

The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The API recorded by EPD at the Tung Chung station during the sampling time ranged from 71 to 75 which was considered 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.

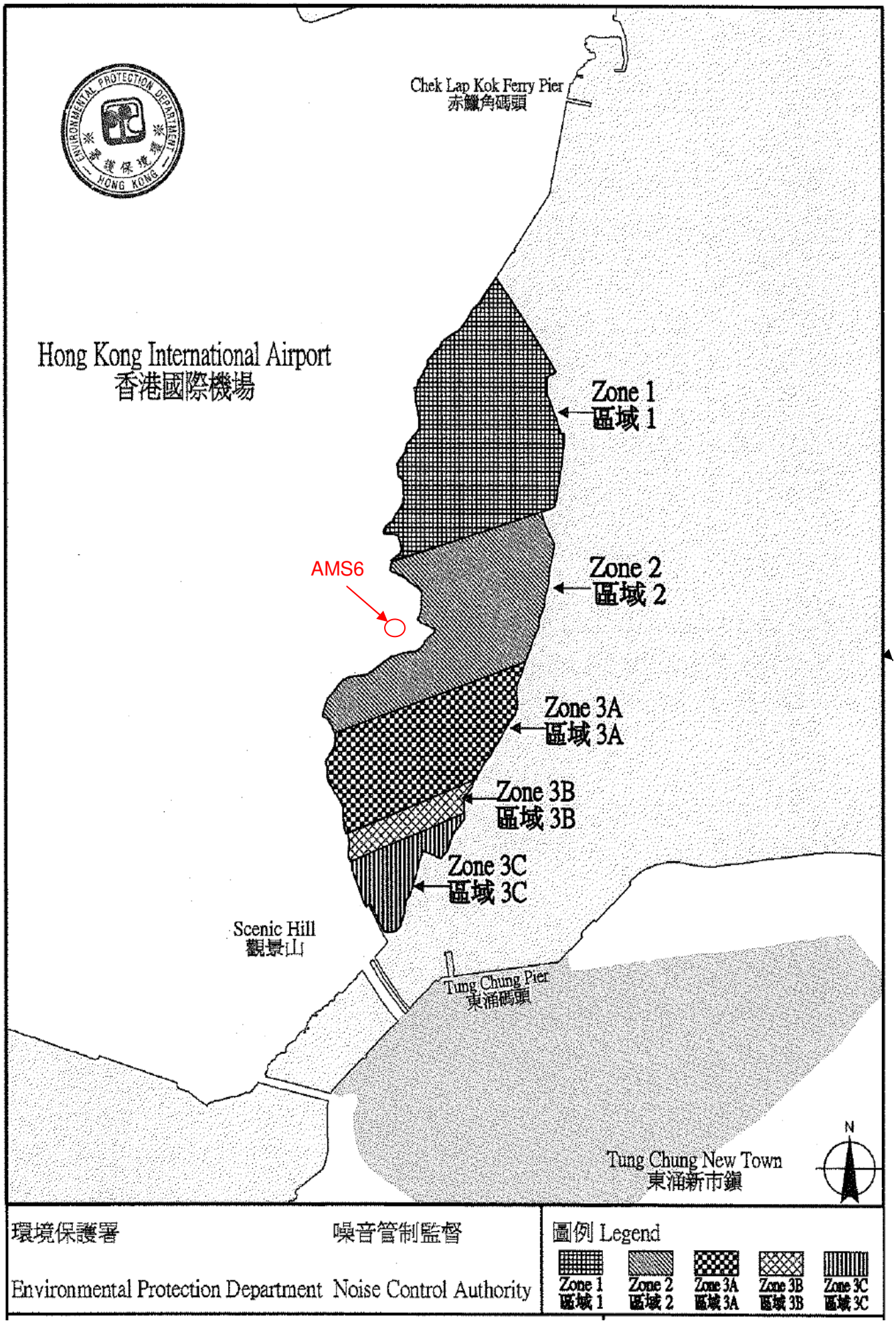
Actions taken/ to be taken:

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 : 6 January 2014

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
AMS6
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1 區域 1
Zone 2 區域 2
Zone 3A 區域 3A
Zone 3B 區域 3B
Zone 3C 區域 3C

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.: 161

Date of Notification: 6 January 2014

Works Inspected: Data collected from water sampling works on 16 December 2013 and the test report was issued on 23 December 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: 14.32 x 120% = **17.2** mg/L for mid ebb) AND CS(Mf)5: 11.58 x 120% = **13.9** 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: 14.32 x 130% =**18.6** mg/L for mid ebb) AND CS(Mf)5: 11.58 x 130% = **15.1** mg/L for mid flood)	14.0	***24.6***

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 16 December 2013, an AL exceedance at station IS10 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, aggregate filling for temporary stone platform, transfer of fill material, stone column works and installation of geotextile tubes at Zone 1, sand filling and stone column works at Zone 2, sand filling, public fill filling, transfer of fill material and band drain installation at Zone 3A, transfer of fill material at Zone 3C were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations 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		
IS10	6.1	to	20.2	7.2	to	16

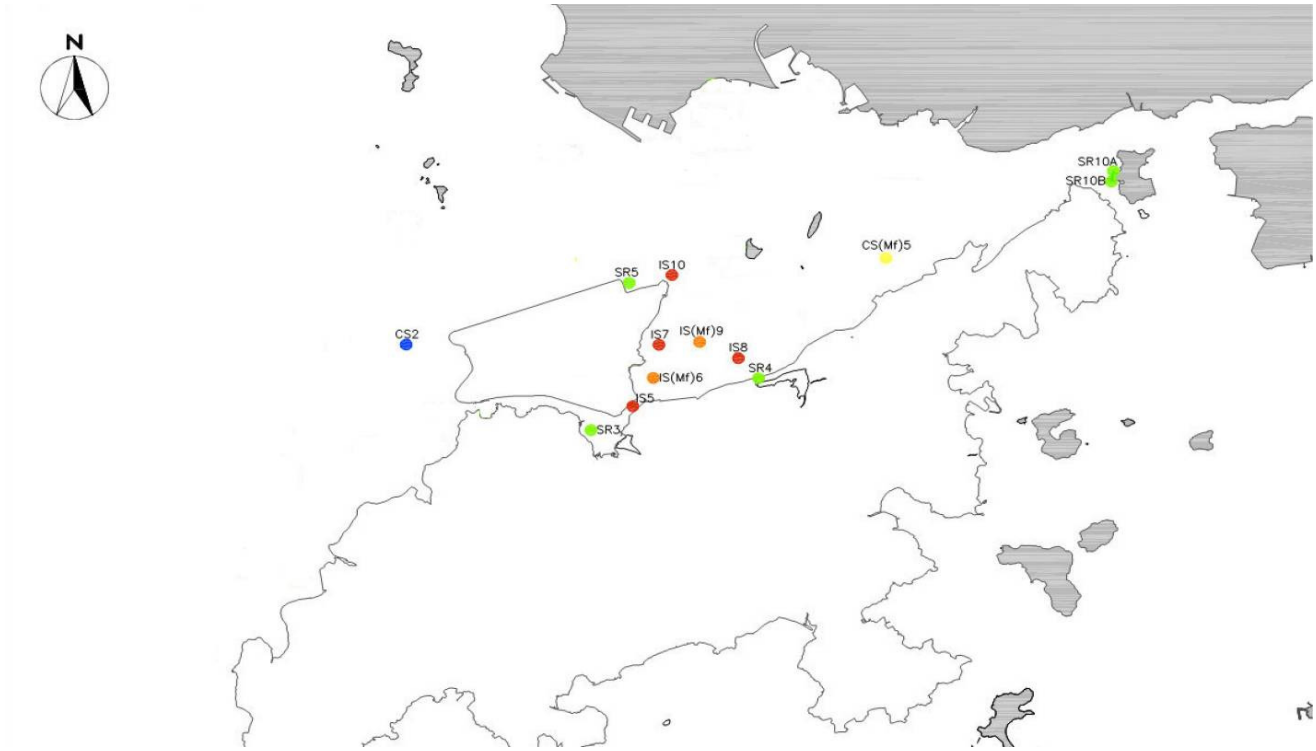
   The measured value at station IS10 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
3. No leakage of turbid water or 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 was not related to contract works, no immediate actions are considered necessary.

Location Plan:



Reviewed by : Claudine Lee Title : ET Leader

Date : 6 January 2014

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.: 162

Date of Notification: 6 January 2014

Works Inspected: Data collected from water sampling works on 18 December 2013 and the test report was issued on 27 December 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: 14.98 x 120% = **18.0** mg/L for mid ebb) AND CS(Mf)5: 10.85 x 120% = **13.0** 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: 14.98 x 130% =**19.5** mg/L for mid ebb) AND CS(Mf)5: 10.85 x 130% = **14.1** mg/L for mid flood)	11.9	***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 18 December 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:

1. Sand filling, aggregate filling for temporary stone platform, transfer of fill material, stone column works and installation of geotextile tubes at Zone 1, sand filling, removal of temporary stone platform and stone column works at Zone 2, sand filling, transfer of fill material, removal of temporary stone platform and band drain installation at Zone 3A, transfer of fill material at Zone 3C 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 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

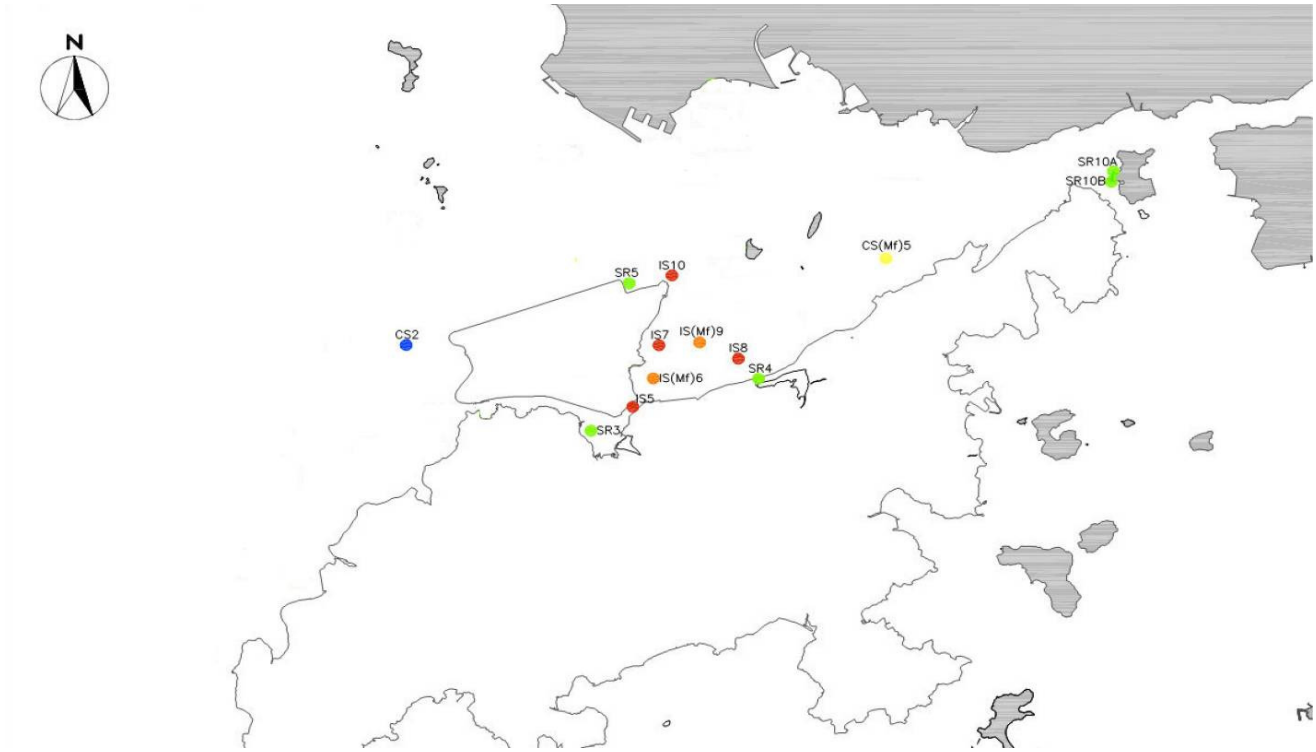
   The measured value at station IS(Mf)9 was within the range of suspended solid during baseline monitoring for mid-flood tide.
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results
4. No leakage of turbid water or any 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 : 6 January 2014

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.: 163

Date of Notification: 6 January 2014

Works Inspected: Data collected from water sampling works on 20 December 2013 and the test report was issued on 31 December 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: 6.12 x 120% = **7.3** mg/L for mid ebb) AND CS(Mf)5: 7.78x 120% = **9.3** 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: 6.12 x 130% =**8.0** mg/L for mid ebb) AND CS(Mf)5: 7.78 x 130% = **10.1** mg/L for mid flood)	14.4	***23.6***
SS	IS8	DA			9.1	***33.3***

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 December 2013, AL exceedances at stations IS7 and 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. Sand filling, aggregate filling for temporary stone platform, transfer of fill material, stone column works and installation of geotextile tubes at Zone 1, sand filling, removal of temporary stone platform and stone column works at Zone 2, sand filling, transfer of fill material, removal of temporary stone platform and band drain installation at Zone 3A, transfer of fill material at Zone 3C were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations IS7 and 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		
IS7	6.1	to	21	7.8	to	34
IS8	5.5	to	25.5	5.8	to	31.3

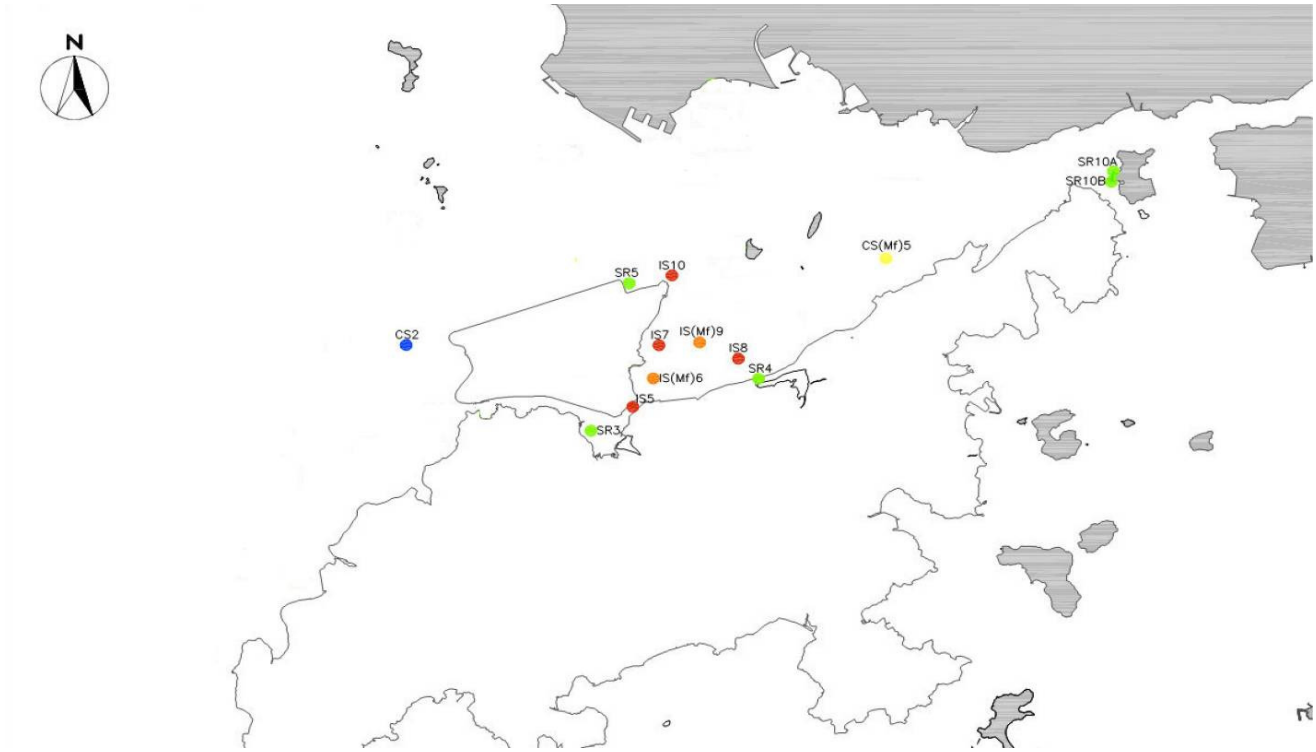
   The measured value at station IS7 was within the range of suspended solid during baseline monitoring for mid-flood tide while the measured value at station IS8 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during 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 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 : 6 January 2014

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.: 164

Date of Notification: 9 January 2014

Works Inspected: Data collected from water sampling works on 27 December 2013 and the test report was issued on 6 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)6	DA	**23.5** and 120% of upstream control station's suspended solid at the same tide of the same day (i.e. CS2: 15.67 x 120% = **18.8** mg/L for mid ebb) AND CS(Mf)5: 13.03 x 120% = **15.6** 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: 15.67 x 130% =**20.4** mg/L for mid ebb) AND CS(Mf)5: 13.03 x 130% = **16.9** mg/L for mid flood)	***27.1***	20.4

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 27 December 2013, an AL exceedance at station IS(Mf)6 was recorded 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. Sand filling, rock filling and installation of stone column at Zone 1 and Zone 2, sand filling, public fill filling, transfer sand and public fill, removal of temporary stone platform at Zone 3A, transfer of fill material at Zone 3C were carried within silt curtain as recommended in the EIA Report.
2. The ranges of suspended solid at stations 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		
IS(Mf)6	7.1	to	19	8.5	to	35

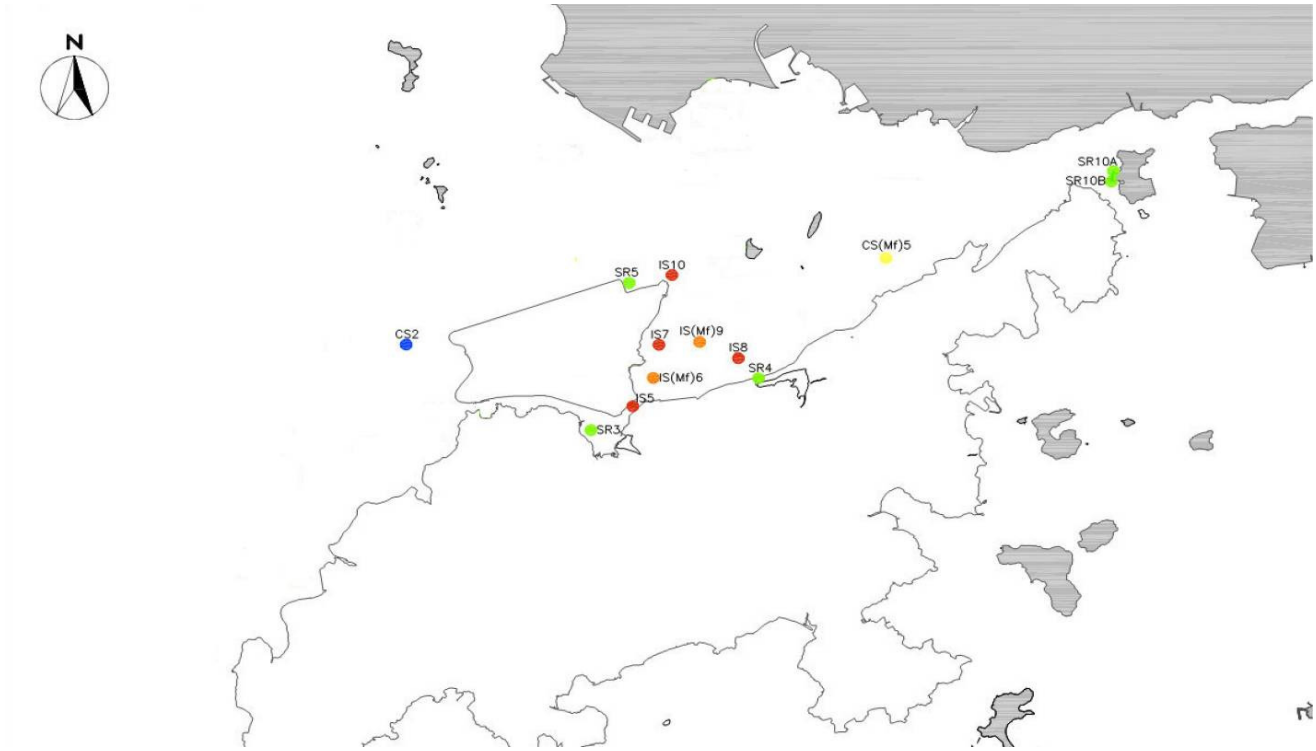
3. The measured value at station IS(Mf)6 was above the range of suspended solid during baseline monitoring for mid-ebb tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results
4. No leakage of turbid water or any abnormity 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 : 9 January 2014

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.: 165

Date of Notification: 9 January 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 23 December 2013 and the test report was issued on 3 January 2014

Monitoring Location: AMS6 – Dragon Air Building

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL (µg/m^3)	LL (µg/m^3)	MEASURED LEVEL, µg/m^3
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	***229***

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 23 December 2013.

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

Zone 1

- Sand filling
- Rock filling
- Transfer of fill material
- Installation of stone column

Zone 2

- Sand filling
- Sand pumping
- Transfer of sand
- Rock filling
- Installation of stone column

Zone 3A
- Sand filling
- Public fill filling
- Transfer of sand and public fill
- Removal of temporary stone platform

Zone 3C
- Transfer of fill material

Mitigation measures such as provision of water spraying on stockpiles and dry areas were implemented. As such, the construction activities were unlikely to generate significant dust impacts on the sampling location.

The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The API recorded by EPD at the Tung Chung station during the sampling time ranged from 63 to 72 which was considered 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.

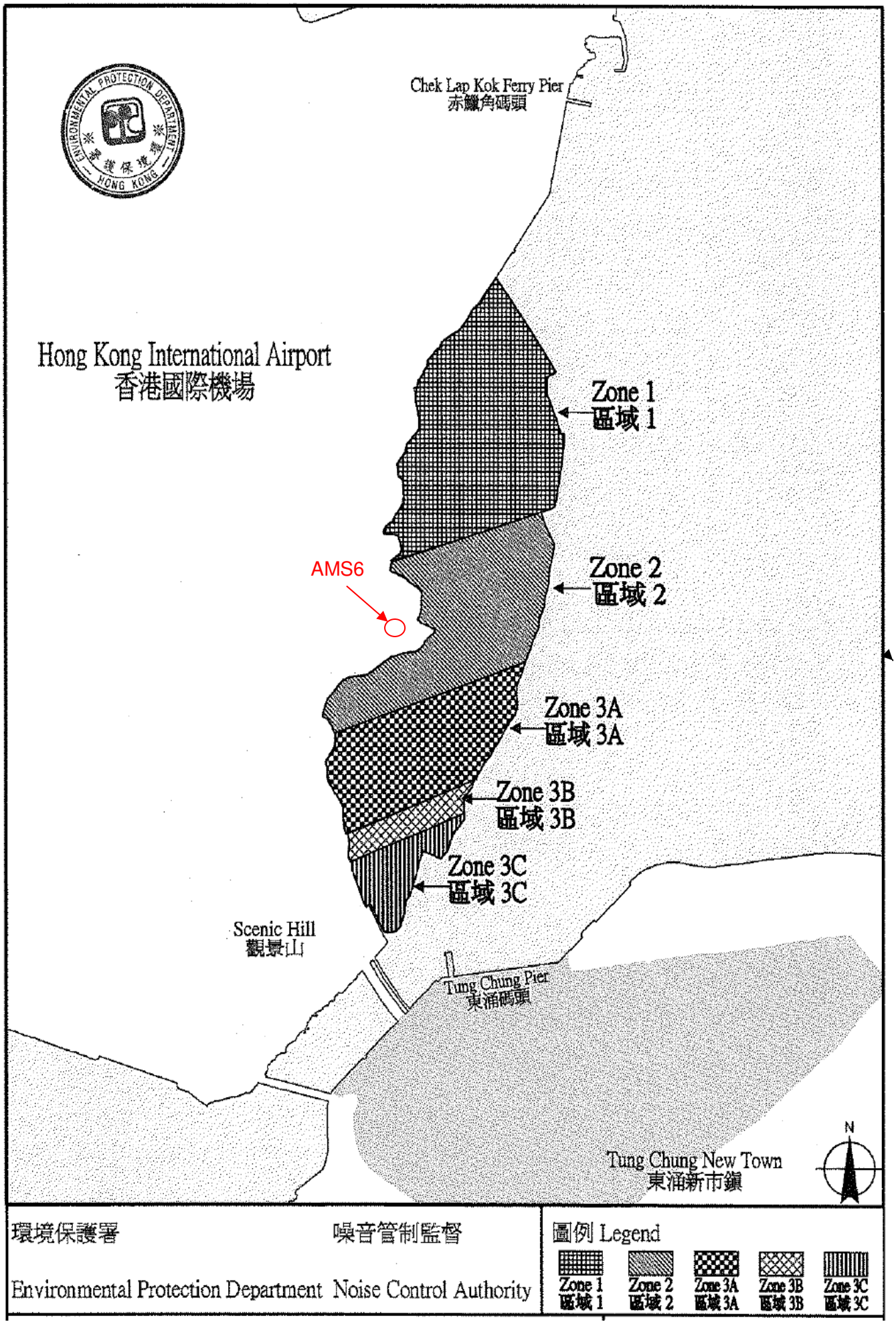
Actions taken/ to be taken:

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 : 9 January 2014

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
AMS6
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1 區域 1
Zone 2 區域 2
Zone 3A 區域 3A
Zone 3B 區域 3B
Zone 3C 區域 3C

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.: 166

Date of Notification: 9 January 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 27 December 2013 and the test report was issued on 6 January 2014

Monitoring Location: AMS6 – Dragon Air Building

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL ($\mu g/m^3$)	LL ($\mu g/m^3$)	MEASURED LEVEL, $\mu g/m^3$
24-hr TSP (8:00 – 8:00 hours)	Dragon Air Building (AMS6)	173	260	***262***

Notes: ***Bold Italic*** means AL exceedance
Bold Italic with underline means LL exceedance

Possible reason for Action or Limit Level Non-compliance:

A Limit Level exceedance of 24-hr TSP level was recorded at AMS6, Dragon Air Building, on 27 December 2013.

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

Zone 1 and Zone 2

- Rock filling
- Sand filling
- Installation of stone platform

Zone 3A
- Sand filling
- Public fill filling
- Transfer sand and public fill
- Removal of temporary stone platform

Zone 3C
- Transfer of fill material

Mitigation measures such as provision of water spraying on stockpiles and dry areas were implemented. As such, the construction activities were unlikely to generate significant dust impacts on the sampling location.

The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The API recorded by EPD at the Tung Chung station during the sampling time ranged from 58 to 75 which was considered 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.

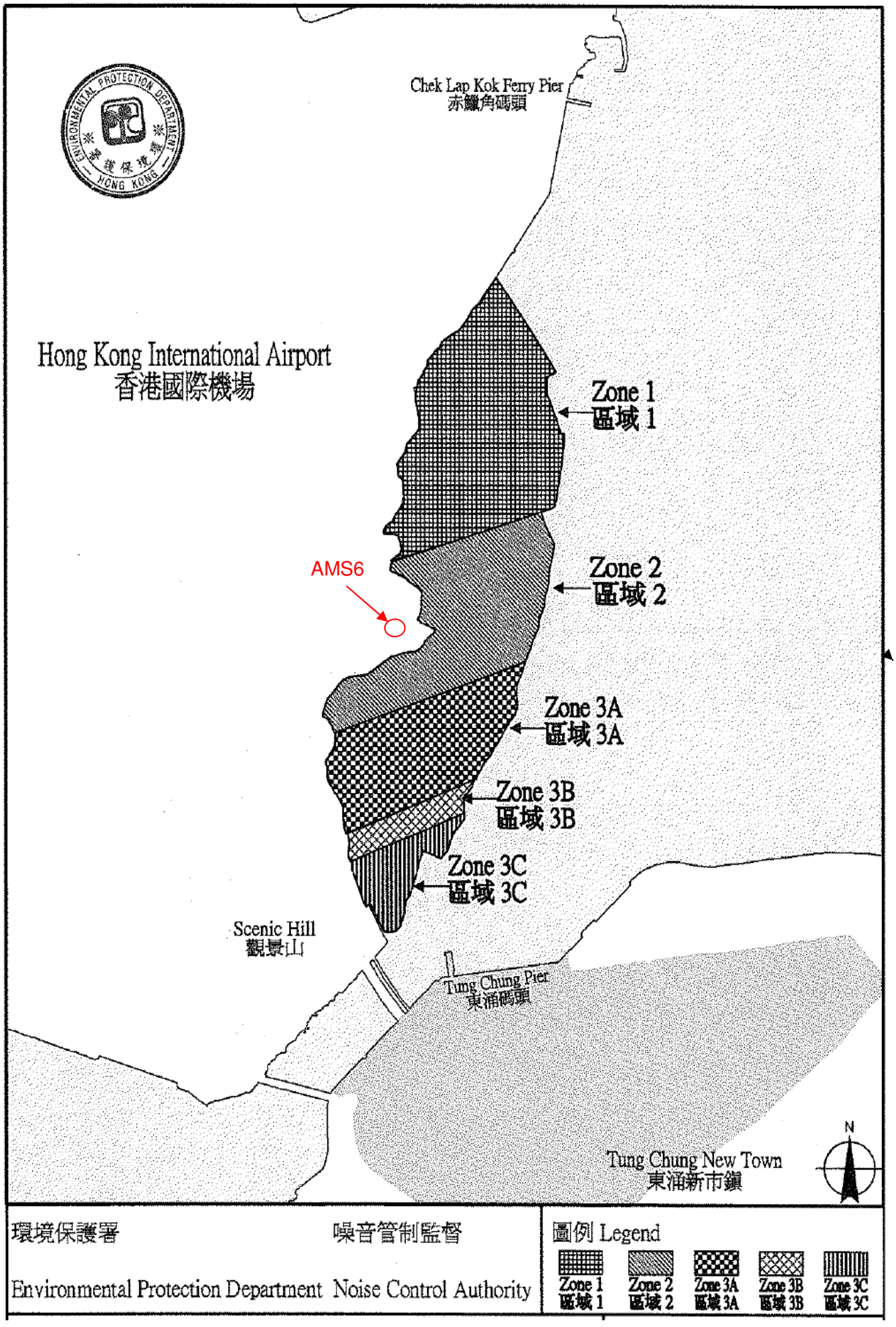
Actions taken/ to be taken:

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 : 9 January 2014

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
AMS6
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1 區域 1
Zone 2 區域 2
Zone 3A 區域 3A
Zone 3B 區域 3B
Zone 3C 區域 3C

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.: 167

Date of Notification: 9 January 2014

Works Inspected: 24-hr TSP monitoring was undertaken on 27 December 2013 and the test report was issued on 6 January 2014

Monitoring Location: AMS5 – Ma Wan Chung Village

Parameter: 24-hour TSP monitoring

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

PARAMETER	STATION	AL ($\mu g/m^3$)	LL ($\mu g/m^3$)	MEASURED LEVEL, $\mu g/m^3$
24-hr TSP (8:00 – 8:00 hours)	Ma Wan Chung Village (AMS5)	164	260	***195***

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 AMS5, Ma Wan Chung Village, on 27 December 2013.

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

Zone 1 and Zone 2

- Rock filling
- Sand filling
- Installation of stone platform

Zone 3A
- Sand filling
- Public fill filling
- Transfer sand and public fill
- Removal of temporary stone platform

Zone 3C
- Transfer of fill material

The construction activities were carried far away from AMS5 (over 700m). In addition, mitigation measures such as provision of water spraying on stockpiles and dry areas were implemented. As such, the construction activities were unlikely to generate significant dust impacts on the sampling location.

The general weather conditions at Tung Chung were foggy and haze during the dust sampling period. The API recorded by EPD at the Tung Chung station during the sampling time ranged from 58 to 75 which was considered 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.

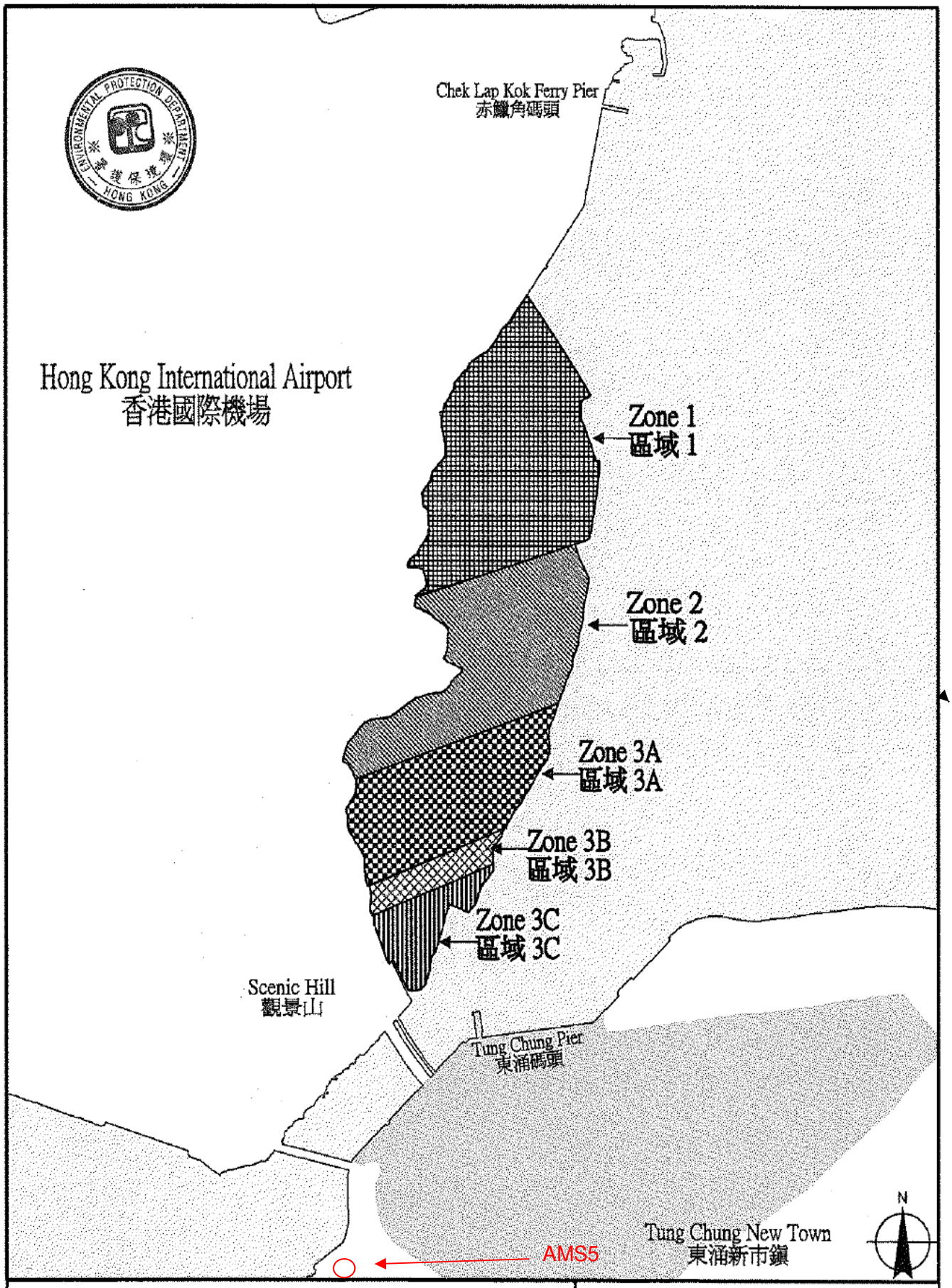
Actions taken/ to be taken:

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 : 9 January 2014

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
AMS5
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1 區域 1
Zone 2 區域 2
Zone 3A 區域 3A
Zone 3B 區域 3B
Zone 3C 區域 3C

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.: 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. CS2: 7.32 x 120% = **8.8** mg/L for mid ebb) AND CS(Mf)5: 6.85 x 120% = **8.2** 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: 7.32 x 130% =**9.5** mg/L for mid ebb) AND CS(Mf)5: 6.85 x 130% = **8.9** mg/L for mid flood)	8.4	***31.3***
SS	SR5	DA			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

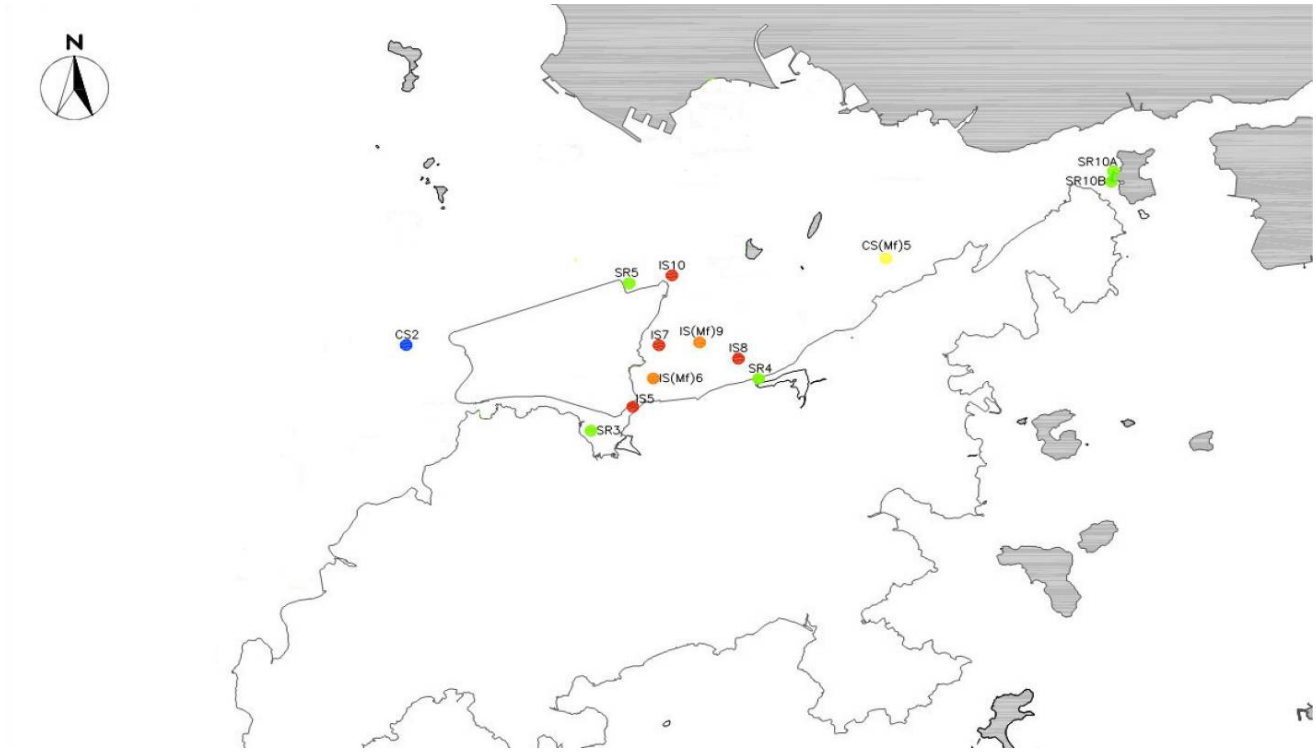
   The measured value at station SR5 was within the range of suspended solid during baseline monitoring for mid-flood tide while the measured value at station SR3 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during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

Location Plan:



Reviewed by : Claudine Lee Title : ET Leader

Date : 12 February 2014

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.: 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:

1. 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 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

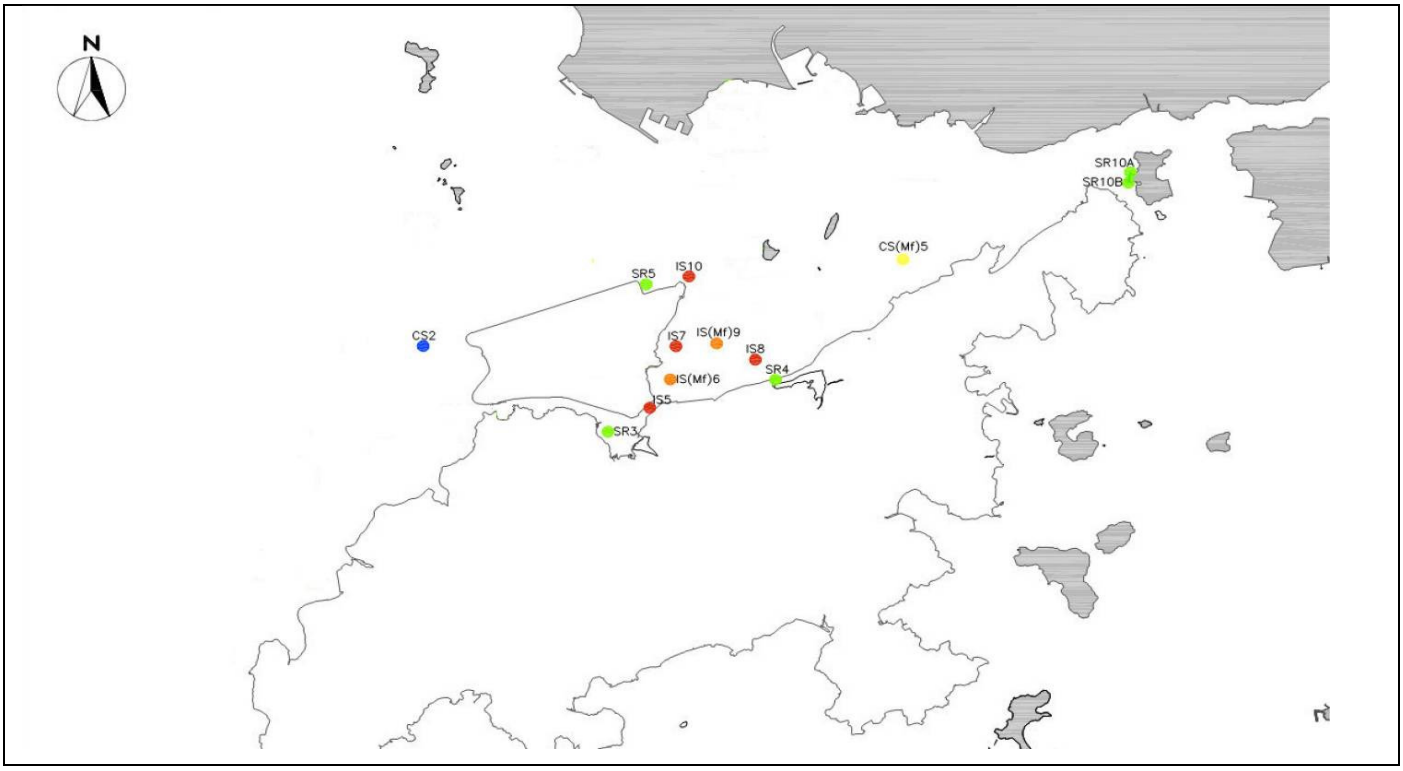
   The measured value at station IS(Mf)9 was within the range of suspended solid during baseline monitoring for mid-flood tide.
3. There were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results
4. No leakage of turbid water or any 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

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.: 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 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

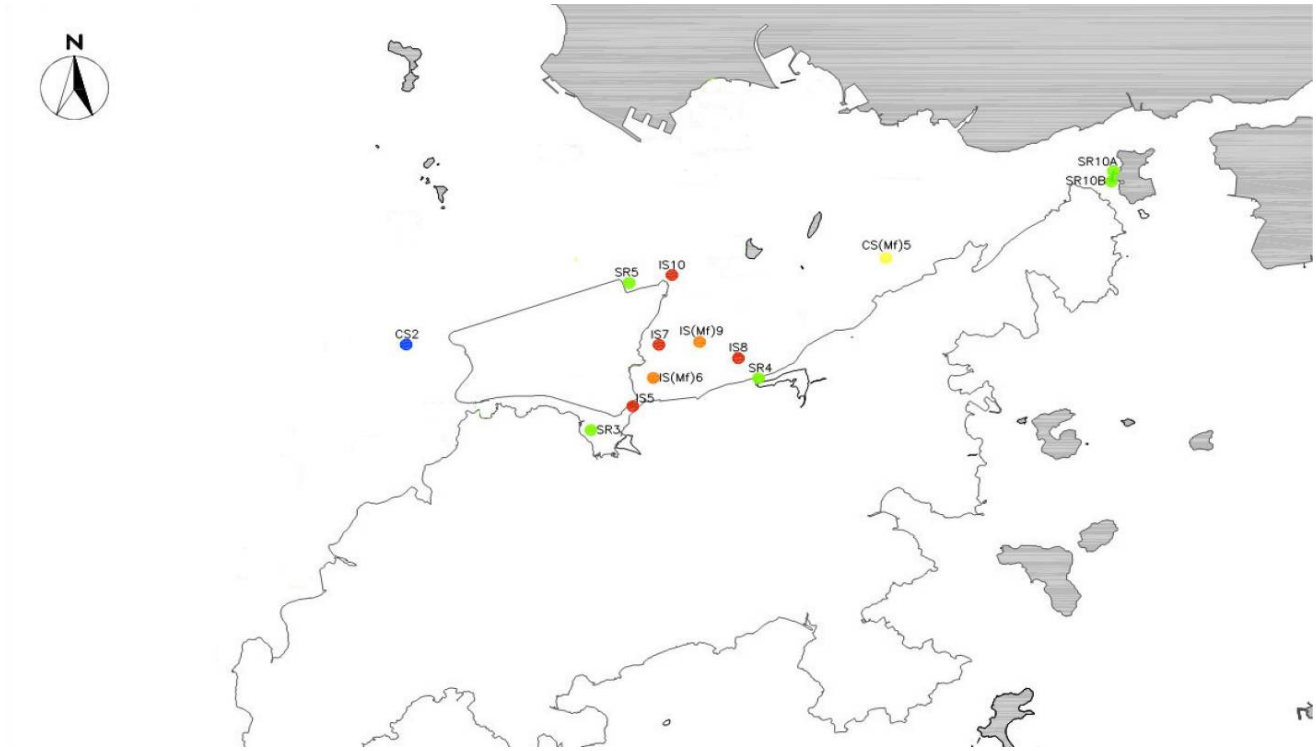
   The measured value at station IS5 was above the range of suspended solid during baseline monitoring for mid-flood tide. However, there were no specific activities recorded during the monitoring period that would cause any significant impacts on the monitoring results.
3. No leakage of turbid water or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

Location Plan:



Reviewed by : Claudine Lee Title : ET Leader

Date : 4 February 2014

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.: 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/m^3)	LL (µg/m^3)	MEASURED LEVEL, µg/m^3
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.

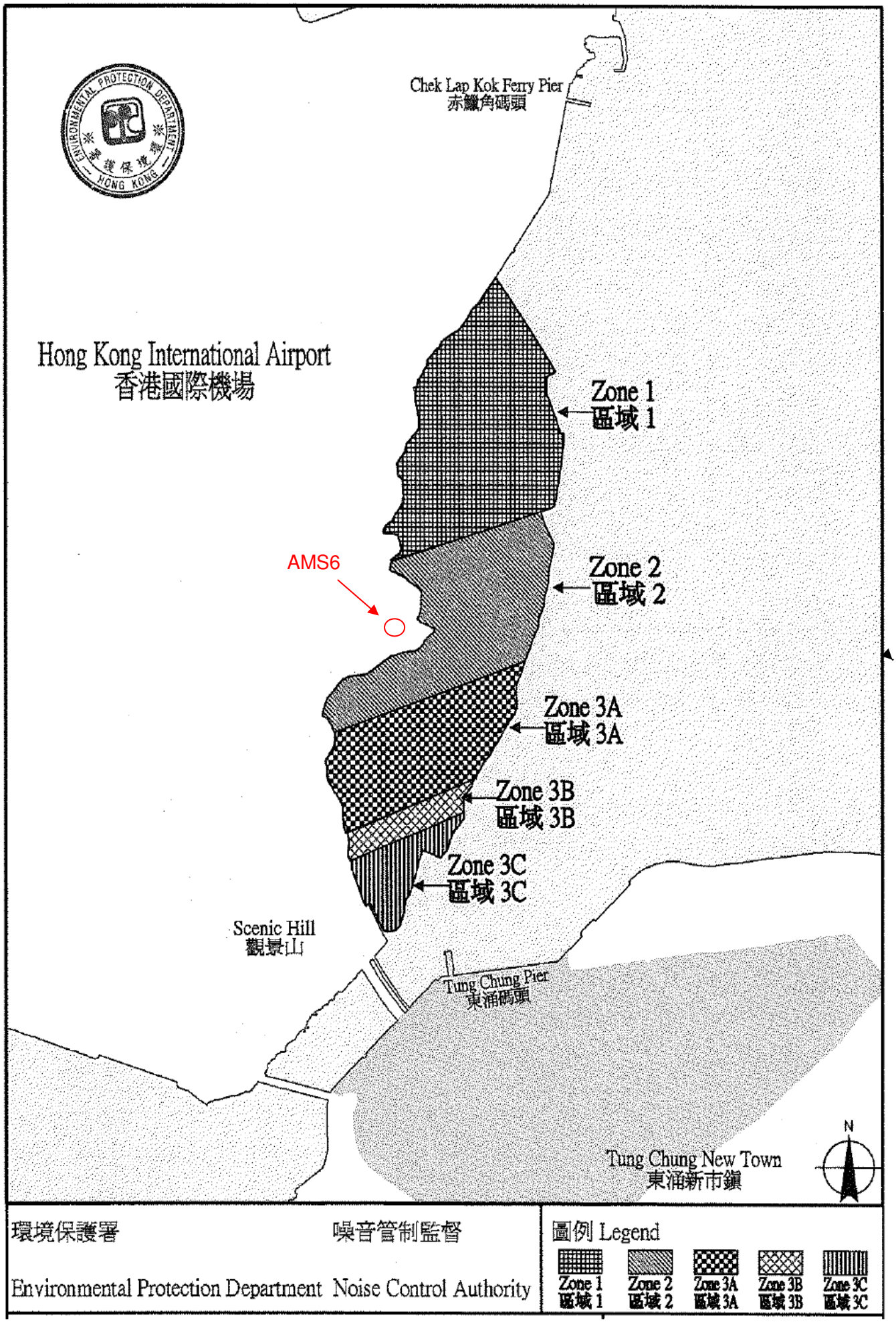
Actions taken/ to be taken:

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

Date : 4 February 2014

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
AMS6
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1 區域 1
Zone 2 區域 2
Zone 3A 區域 3A
Zone 3B 區域 3B
Zone 3C 區域 3C

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.: 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 ($\mu g/m^3$)	LL ($\mu g/m^3$)	MEASURED LEVEL, $\mu g/m^3$
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.

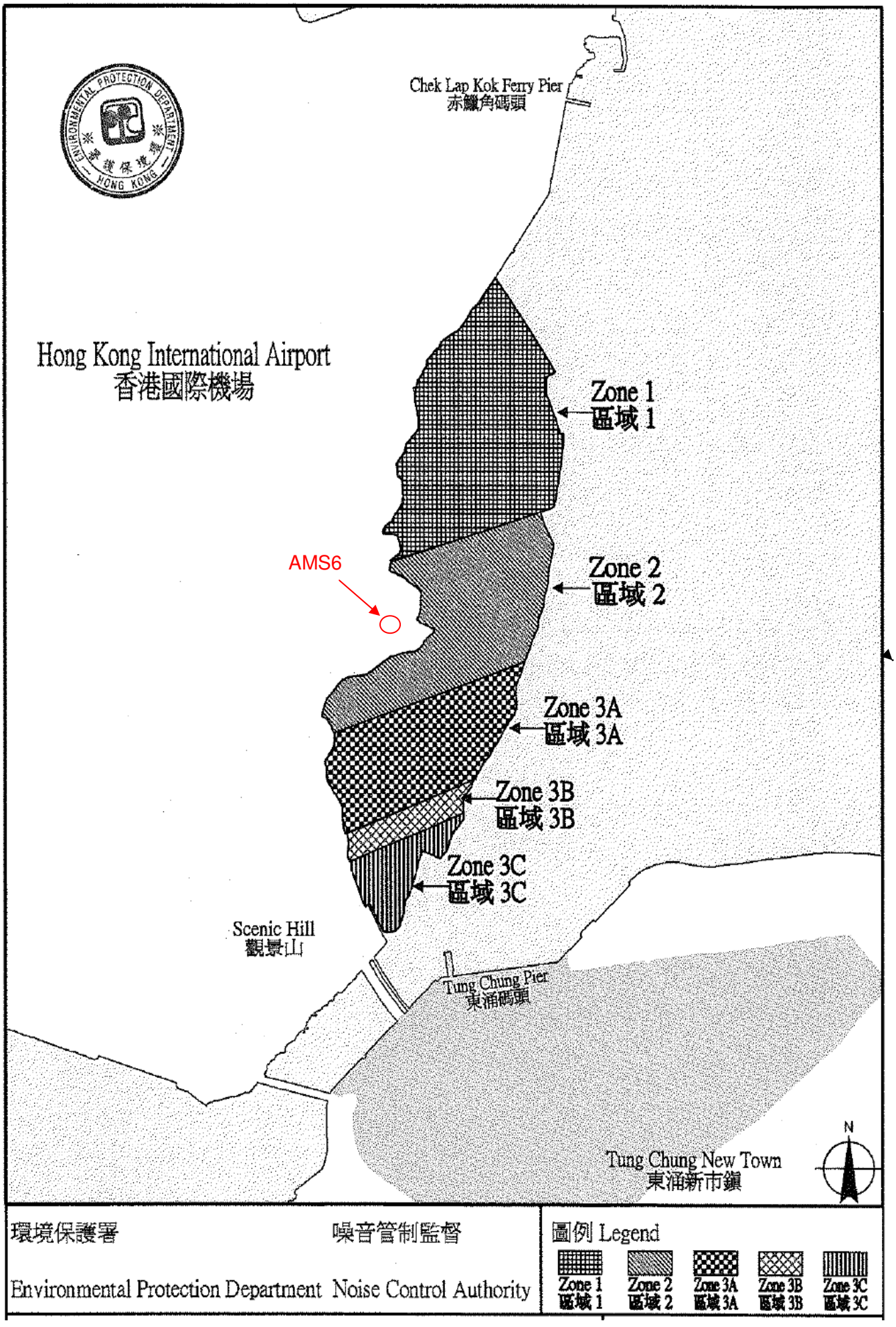
Actions taken/ to be taken:

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

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


Chek Lap Kok Ferry Pier
赤鱲角碼頭
Hong Kong International Airport
香港國際機場
Zone 1
區域 1
AMS6
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C
Scenic Hill
觀景山
Tung Chung Pier
東涌碼頭
Tung Chung New Town
東涌新市鎮
N
環境保護署
Environmental Protection Department
噪音管制監督
Noise Control Authority
圖例 Legend
Zone 1
區域 1
Zone 2
區域 2
Zone 3A
區域 3A
Zone 3B
區域 3B
Zone 3C
區域 3C

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.: 173 ver2

Date of Notification: 5 May 2014

Works Inspected: Not Applicable

Monitoring Location: NEL & NWL

Parameter: Ecology (Chinese White Dolphin Monitoring)

Action & Limit Levels			**Monitoring Results**
	North Lantau Social Cluster		The quarter of December 2013 - February 2014
	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)	***STG = 0.45; ANI = 1.34***
Northwest Lantau (NWL)	STG < 6.9 & ANI < 31.3		STG = 8.21; ANI = 32.58

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:

According to the contractor's information, the marine activities undertaken for HKLR03 during the two quarterly periods (September to November 2013 and December 2013 to February 2014) included stone platform construction, reclamation, stone column installation, band drain installation and excavation of stone platform, surcharge activities, construction of seawall and geotextile tube installation works.

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 informed IEC, ENPO SOR and Contractor via email on 6 March 2014.

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 (sixth quarter of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.0774 and 0.1671 respectively. If the alpha value is set at 0.1, significant difference was detected between the baseline and present quarters in the average dolphin encounter rates of STG, but not in the encounter rates of ANI.

For the comparison between the baseline period and the cumulative quarters in impact phase (i.e. first six quarters of the impact phase), the p-value for the differences in average dolphin encounter rates of STG and ANI were 0.0179 and 0.0092 respectively. If the alpha value is set at 0.1, significant difference was detected in both the average dolphin encounter rates of STG and ANI (i.e. between the two periods and the locations).

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 December 2013 to February 2014 has been reviewed by the dolphin specialist, and only two groups of five dolphins were sighted from 163.31 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 winter 2013 in NEL is accurate.

Identify source(s) of impact:

There is no evidence showing that the sources of impact 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. The Contractor will continue to 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 : 5 May 2014

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