

Highways Department

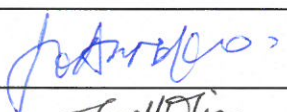

Agreement No. CE 20/2009 (EP)

Environmental Team for the Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling

(Stage 1) Between Island House Interchange and Tai Hang - Investigation

**Final EM&A Review Report
for November 2009 – September 2014**

[11/2014]

	Name	Signature
Prepared & Checked:	Joanne Ko	
Reviewed & Approved:	Y T Tang	

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AECOM Asia Co. Ltd.
15/F, Grand Central Plaza, Tower 1, 138 Shatin Rural Committee Road, Shatin, NT, Hong Kong
Tel: (852) 3922 9000 Fax: (852) 2317 7609 www.aecom.com



Our ref AFK/TK/bw/T264022/22.01/L-0215
T 2828 5919
E terence.kong@mottmac.com.hk
Your ref

Hyder-Arup-Black & Veatch Joint Venture
c/o Hyder Consulting Limited
47/F Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong

19 November 2014
By Post

Attn: Mr. James Penny

Dear Sir,

**Widening of Tolo Highway between
Island House Interchange and Tai Hang
Environmental Permit No.: EP-324/2008/B
Submission of Final EM&A Review Report for Construction Phase of Stage 1 of the Project**

We refer to the Final EM&A Review Report covering the construction phase of Stage 1 for the captioned Project submitted by ET via email on 31 October and 12 and 19 November 2014. We confirm we have no comment.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

A handwritten signature in black ink, appearing to read 'Terence Kong'.

Terence Kong
Independent Environmental Checker

c.c. HyD – Mr. Raymond T W Kong / Mr. Dennis Wong
ETL, AECOM – Mr. Y T Tang

(Fax: 2714 5198)
(Fax: 2317 7609)

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EXECUTIVE SUMMARY

The proposed widening of Tolo Highway and Fanling Highway between Island House Interchange and Fanling (the Project) is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is governed by an Environmental Permit (EP-324/2008)(EP) issued by EPD on 23 December 2008. Subsequently, EPD issued a Variation of Environmental Permit (EP-324/2008/A) (VEP) on 31 January 2012. The VEP (EP-324/2008/B) was subsequently granted on 17 March 2014 which superseded the previous EP (EP-324/2008/A). The most recent variation of the EP does not cover Stage 1 (between Island House Interchange and Tai Hang) of the Project.

The Project aims to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.

The construction works for this Project will be delivered in 2 stages i.e. Stage 1 (between Island House Interchange and Tai Hang) and Stage 2 (between Tai Hang and Wo Hop Shek Interchange). The construction works of Stage 1 commenced on 23 November 2009 and were substantially completed on 30 September 2014. This report focuses on Stage 1 of the Project only.

The construction phase of Stage 1 under the EP and the EM&A programme for Stage 1 of the Project commenced on 23 November 2009. The impact environmental monitoring and audit includes air quality and noise monitoring.

This report documents the findings of EM&A works conducted in the period between 23 November 2009 and 30 September 2014.

The construction phase of Stage 1 under the EP commenced on 23 November 2009. Details of the construction works carried out by the Contract 1 Contractor (CSCE) in this reporting period are listed below:

- Asphalt Laying;
- At-grade Road Construction;
- Bridge column and pier head construction;
- Bridge Deck Construction;
- Bridge Jacking;
- Bored piling;
- Construction of temporary access;
- Construction of temporary bridges;
- Construction of retaining wall;
- Construction of step channel;
- Demolition and re-construction of box culverts;
- Demolition of existing bridges;
- Demolition of existing central dividers;
- Drainage works;
- Excavation and backfilling;
- Formation of slip road;
- Modification of Edge coping;
- Noise Barrier Footing Construction and Panel Installation;
- Pile Cap Construction;
- Pipe pile wall construction;
- Pre-bored H-piles construction;
- Retaining Wall Construction;
- Road paving;
- Site investigation;
- Slope works;
- Soil Nails Works and Installation of Soil Nails;
- Temporary Shoring, Sheetpiling and Excavation;
- Tree felling and transplanting of trees; and
- Widening and Demolition of Central Dividers.

The construction works carried out by the Contract 2 Contractor (GCL) in the reporting period were:

- Condition survey of existing structures;
- Construction of haul roads and temporary site accesses;
- Construction of Pilecap / Spread footing of Noise Barrier / Semi Noise Enclosure;
- Construction of retaining wall and associated mini-piles;
- Entrusted watermains works;
- Excavation of trial trenches to locate existing utilities;
- Extension of box culverts and subways;
- Ground investigation and predrilling;
- Initial and record survey;
- Landscaping works;
- Modification / Demolition of existing bridge structures;
- Noise barrier construction;
- NTHA mitigation works;
- Piling and pile cap of bridges;
- Piling and structural works of bridges;
- Retaining wall construction;
- Road and drainage works;
- Setting up temporary traffic arrangement;
- Sewer Installation;
- Slope works, including installation of soil nails;
- Structural works of bridges;
- Survey Setting out works for slopes and structures; and
- Tree felling and tree transplant.

Breaches of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring in the reporting period.

One (1) Limit Level exceedance was recorded on 22 March 2010 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.3.

One (1) Action Level exceedance was recorded on 2 August 2012 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.8.

Breaches of Action and Limit Levels for Noise

No Limit Level exceedance of construction noise was recorded in the reporting period.

There were twenty-two (22) noise-related complaints followed up by the Environmental Team in the reporting period. Hence, twenty-two (22) Action Level exceedances of construction noise were recorded in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. The summary of investigation is described in Section 7.1.

Complaint, Notification of Summons and Successful Prosecution

Thirty-nine (39) environmental complaints were followed up by the Environmental Team in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. The summary of investigation is described in Appendix F.

No notification of summons and successful prosecutions was received in the reporting period.

1 INTRODUCTION

Background

- 1.1. Tolo Highway and Fanling Highway are expressways in the North East New Territories connecting Sha Tin, Tai Po and Fanling. These highways form a vital part of the strategic Route 9, which links Hong Kong Island to Shenzhen. At present, this section of Route 9 is dual 3-lane carriageway. However, at several major interchanges along this section of Route 9, the highway is only dual-2 lane. Severe congestion is a frequent occurrence during peak periods, particularly in the Kowloon bound direction.
- 1.2. The objective of the Project “Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling” is to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.
- 1.3. The Project is a designated project and is governed by EP (EP-324/2008/B). The most recent variation of the EP does not cover Stage 1 (between Island House Interchange and Tai Hang) of the Project.
- 1.4. The scope of the Project comprises mainly:
 - (i) Widening of a 5.7 km section of Tolo Highway and 3.0 km section of Fanling Highway between Island House Interchange and Wo Hop Shek Interchange from the existing dual 3-lane to dual 4-lane, including construction of new vehicular bridges;
 - (ii) Widening of interchange sections at Island House Interchange, Tai Po North Interchange, and Lam Kam Road Interchange from dual 2-lane to dual 3-lane, except Sha Tin bound carriageway at Tai Po North Interchange, which is widened from 3-lane to 4-lane, including realignment of various slip roads;
 - (iii) Modification and reconstruction of highways, vehicular bridges, underpasses and footbridges.
- 1.5. The construction works for this Project will be delivered in 2 stages i.e. Stage 1 (between Island House Interchange and Tai Hang) and Stage 2 (between Tai Hang and Wo Hop Shek Interchange). The construction works of Stage 1 were commenced on 23 November 2009 and substantially completed on 30 September 2014. This report focuses on Stage 1 of the Project only.
- 1.6. The construction works for Stage 1 of the Project will be implemented under 2 works contracts (Contract 1 and Contract 2). Contract 1 covers the section of Tolo Highway between Island House Interchange and Ma Wo, Contract 2 covers the section of Tolo Highway between Ma Wo and Tai Hang.
- 1.7. Hyder-Arup-Black and Veatch Joint Venture (HABVJV) are appointed by Highways Department as the consultants for the design and construction assignment for the Tolo project under Agreement No. CE 58/2000 Supplementary Agreement No. 3 (SA3) (i.e. the Engineer for the Contracts).
- 1.8. China State Construction Engineering (Hong Kong) Ltd. (CSCE) was commissioned as the Contractor of Contract 1 of Stage 1 of the Project, while Gammon Construction Limited (GCL) was commissioned as the Contractor of Contract 2 of Stage 1 of the Project.
- 1.9. AECOM Asia Co. Ltd. was employed by Highways Department as the Environmental Team to undertake the EM&A works for Stage 1 of the Project and Mott MacDonald Hong Kong Ltd. acts as the Independent Environmental Checker (IEC) for the Contracts.
- 1.10. The construction phase of Stage 1 under the EP commenced on 23 November 2009.
- 1.11. According to the updated EM&A Manual of Stage 1 of the Project, there is a need of an EM&A programme including air quality and noise monitoring. The EM&A programme for Stage 1 of the Project commenced on 23 November 2009.

Scope of Report

- 1.12. This is Final Environmental Monitoring and Audit (EM&A) Review Report under the Agreement No. CE 20/2009 (EP) - Widening of Tolo Highway between Island House Interchange and Tai Hang – Investigation. This report presents a summary of the environmental monitoring and audit works, list of activities and mitigation measures proposed by the ET for Stage 1 of the Project from 23 November 2009 to 30 September 2014.

Project Organization

- 1.13. The project organization structure is shown in Appendix A. The key personnel contact names and numbers are summarized in Table 1.1.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
ER of Stage 1, Contract 1 (Hyder-Arup-Black & Veatch Joint Venture)	Chief Resident Engineer /TOL01	James Tsang	9038 8797	26674000
ER of Stage 1, Contract 2 (Hyder-Arup-Black & Veatch Joint Venture)	Chief Resident Engineer /TOL02	Paul Appleton	9097 5833	2653 2348
IEC of Stage 1 (Mott MacDonald Hong Kong Ltd.)	Independent Environmental Checker	Terence Kong	2828 5919	2827 1823
Contractor of Stage 1, Contract 1 (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Eddie Tang	9863 7686	2667 5666
	Environmental Officer	Michael Tsang	9277 4956	2667 5666
Contractor of Stage 1, Contract 2 (Gammon Construction Ltd.)	Site Agent	John Chan	3126 1202	2559 3410
	Environmental Officer	Crispin Ao	9223 8773	2559 3410
ET of Stage 1 (AECOM Asia Company Limited)	ET Leader	Y T Tang	3922 9393	3922 9797

Summary of Construction Works

1.14. The construction phase of Stage 1 under the EP commenced on 23 November 2009. Details of the construction works carried out by the Contract 1 Contractor (CSCE) in this reporting period are listed below:

- Asphalt Laying;
- At-grade Road Construction;
- Bridge column and pier head construction;
- Bridge Deck Construction;
- Bridge Jacking;
- Bored piling;
- Construction of temporary access;
- Construction of temporary bridges;
- Construction of retaining wall;
- Construction of step channel;
- Demolition and re-construction of box culverts;
- Demolition of existing bridges;
- Demolition of existing central dividers;
- Drainage works;
- Excavation and backfilling;
- Formation of slip road;
- Landscape softworks;
- Modification of Edge coping;
- Noise Barrier Footing Construction and Panel Installation;
- Pile Cap Construction;
- Pipe pile wall construction;
- Pre-bored H-piles construction;
- Retaining Wall Construction;
- Road paving;
- Site investigation;
- Slope works;
- Soil Nails Works and Installation of Soil Nails;
- Temporary Shoring, Sheetpiling and Excavation;
- Tree felling and transplanting of trees; and
- Widening and Demolition of Central Dividers.

1.15. The construction works carried out by the Contract 2 Contractor (GCL) in the reporting period were:

- Condition survey of existing structures;
- Construction of concrete profile barrier and beam barrier;
- Construction of haul roads and temporary site accesses;
- Construction of Pilecap / Spread footing of Noise Barrier / Semi Noise Enclosure;
- Construction of retaining wall and associated mini-piles;
- Entrusted watermains works;
- Excavation of trial trenches to locate existing utilities;
- Extension of box culverts and subways;
- Ground investigation and predrilling;
- Initial and record survey;
- Landscaping works;
- Modification / Demolition of existing bridge structures;
- Noise barrier construction;
- NTHA mitigation works;
- Piling and pile cap of bridges;
- Piling and structural works of bridges;
- Retaining wall construction;
- Road and drainage works;
- Setting up temporary traffic arrangement;
- Sewer Installation;
- Slope works, including installation of soil nails;

- Structural works of bridges;
- Survey Setting out works for slopes and structures; and
- Tree felling and tree transplant.

- 1.16. The general layout plan of the Project site showing the contract areas is shown in Figure 1.1.
- 1.17. The environmental mitigation measures implementation schedule (EMIS) is presented in Appendix B.

2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters

- 2.1. The updated EM&A Manual designated 4 air quality monitoring stations and 7 noise monitoring stations to monitor environmental impacts on air quality and noise due to Stage 1 of the Project.
- 2.2. For air quality, monitoring locations AM2 (Shan Tong New Village) and AM3 (Riverain Bayside) were set up at the proposed locations in accordance with updated EM&A Manual. However, for monitoring locations: Dynasty View and Tai Po Garden, proposed in the updated EM&A Manual, as approval could not be obtained from the owner's corporation of the premises, impact air quality monitoring was conducted at alternative monitoring locations: AM1 (Ha Wun Yiu) and AM4 (Tai Kwong Secondary School). The monitoring station at 13 Ha Wun Yiu (AM1) was relocated to Fan Sin Temple, 3 Sheung Wun Yiu (AM1A) in February 2010. Also, the monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) in September 2011.
- 2.3. For noise, monitoring stations NM3 (Wong Shiu Chi Middle School), NM6 (PLK Tin Ka Ping Primary School) and NM7 (Riverain Bayside) were set up at the proposed locations in accordance with updated EM&A Manual. However, for monitoring locations: Tai Po Garden, Dynasty View, Hong Kong Teachers' Association Lee Heng Kwei Secondary School and Grand Palisades, proposed in the updated EM&A Manual, as approval of access could not be obtained from the owner's corporation of the premises or the principal of the education institutes, impact noise monitoring was conducted at alternative monitoring locations: NM1 (Tai Kwong Secondary School), NM2 (Ha Wun Yiu), NM4 (Uptown Plaza) and NM5 (The Paragon). The monitoring station at Tai Kwong Secondary School (NM1) was relocated to 168 Shek Kwu Lung Village (NM1A) in September 2011.
- 2.4. As Tai Kwong Secondary School was closed down with effect from 1 September 2011, air quality (AM4) and noise (NM1) monitoring stations were relocated to 168 Shek Kwu Lung Village, naming AM4A and NM1A respectively, starting from 1 September 2011. The same air quality Action and Limit of AM4 were adopted for AM4A. For the measured construction noise level, the same noise Action Level of NM1 was adopted for NM1A, whereas Limit Level for residential noise sensitive receiver was adopted for NM1A.
- 2.5. The monitoring locations used during the reporting period are depicted in Figure 2.1.
- 2.6. The updated EM&A Manual also required environmental site inspections for air quality, noise, water quality, chemical, waste management, ecology and landscape and visual impact.

Environmental Quality Performance Limits (Action/Limit Levels)

- 2.7. The environmental quality performance limits (i.e. Action/Limit Levels) of air quality monitoring were derived from the baseline air quality monitoring results at the respective monitoring stations (AM1, AM2, AM3 and AM4), while the environmental quality performance limits of noise monitoring were defined in the EM&A Manual.
- 2.8. The environmental quality performance limits of air quality and noise monitoring are given in Appendix C.

Environmental Mitigation Measures

- 2.9. Relevant environmental mitigation measures were stipulated in the Particular Specification and EP (EP-324/2008/B) for the Contractor to adopt. A list of environmental mitigation measures and their implementation statuses are given in Appendix B.

3 AIR QUALITY MONITORING

- 3.1. Air quality monitoring, including 1-hour and 24-hour TSP, was conducted at least 3 times every 6 days and at least once every 6 days respectively at the 4 monitoring stations, in accordance with the updated EM&A Manual.
- 3.2. Figure 2.1 shows the locations of monitoring stations used during the reporting period. Table 3.1 describes the details of the monitoring stations.

Table 3.1 Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location	Description
AM1A	3 Sheung Wun Yiu	Ground floor at the boundary outside Fan Sin Temple
AM2	12 Shan Tong New Village	Ground floor outside the premise
AM3	Riverain Bayside	Roof of the switch room
AM4A	168 Shek Kwu Lung Village	Roof of the switch room

- 3.3. The weather was mostly sunny, with several fine, cloudy and rainy days within the reporting period. The major dust source in the reporting period included construction activities from Stage 1 of the Project, as well as nearby traffic emissions.
- 3.4. The number of monitoring events and exceedances recorded in each month of the reporting period are presented in Table 3.2 and Table 3.3 respectively.

Table 3.2 Summary of Number of Monitoring Events for 1-hr & 24-hr TSP Concentration

Monitoring Parameter	Location	No. of monitoring events
		Nov 09 – Sep 14
1-hr TSP	AM1*	48
	AM1A	815
	AM2	863
	AM3	863
	AM4 [#]	339
	AM4A	538
24-hr TSP	AM1**	13
	AM1A	309
	AM2	324
	AM3	325
	AM4 [#]	113
	AM4A	254

* AM1 1-hr TSP monitoring station was relocated to AM1A on 26 February 2010

** AM1 24-hr TSP monitoring station was relocated to AM1A on 25 February 2010

AM4 1-hr and 24-hr TSP monitoring station was relocated to AM4A on 1 September 2011

Table 3.3 Summary of Number of Exceedances for 1-hr & 24-hr TSP Monitoring

Monitoring Parameter	Location	Level of Exceedance	Level of Exceedance
			Nov 09 – Sep 14
1-hr TSP	AM1*	Action	0
		Limit	0
	AM1A	Action	0
		Limit	0
	AM2	Action	0
		Limit	0
	AM3	Action	0
		Limit	0
	AM4	Action	0
		Limit	0
	AM4A#	Action	0
		Limit	0
		Total	0
	24-hr TSP	AM1**	Action
Limit			0
AM1A		Action	0
		Limit	0
AM2		Action	1
		Limit	1
AM3		Action	0
		Limit	0
AM4#		Action	0
		Limit	0
AM4A		Action	0
		Limit	0
		Total	2

* AM1 1-hr TSP monitoring station was relocated to AM1A on 26 February 2010

** AM1 24-hr TSP monitoring station was relocated to AM1A on 25 February 2010

AM4 1-hr and 24-hr TSP monitoring station was relocated to AM4A on 1 September 2011

- 3.5. All 1-hour TSP results were below the Action and Limit Levels at all monitoring locations in the reporting period.
- 3.6. One (1) Limit Level exceedance of 24-hour TSP monitoring was recorded at AM2 on 22 March 2010. The possible reason for exceedance is listed in Section 6.3.
- 3.7. One (1) Action Level exceedance of 24-hour TSP monitoring was recorded at AM2 on 2 August 2012. The possible reason for exceedance is listed in Section 6.8.
- 3.8. The graphical plots of the impact air quality monitoring results are provided in Appendix D.

4 CONSTRUCTION NOISE MONITORING

- 4.1. Construction noise monitoring was conducted at 7 monitoring stations for at least once per week during 07:00 – 19:00 in the reporting period.
- 4.2. Figure 2.1 shows the locations of the monitoring stations used during the reporting period. Table 4.1 describes the details of the monitoring stations.

Table 4.1 Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Description
NM1A	168 Shek Kwu Lung Village	1m from the exterior wall of the village house

Monitoring Station	Location	Description
NM2	38 Ha Wun Yiu	1.2m from the ground floor free-field of the village house
NM3	Wong Shiu Chi Middle School	1m from the exterior of the roof top façade of the New Wing
NM4	Uptown Plaza	1m from the exterior of the roof top façade of Block 4
NM5	The Paragon	1m from the exterior of the roof top façade of the club house
NM6	PLK Tin Ka Ping Primary School	1.2m ground floor free-field near the entrance
NM7	Riverain Bayside	1m from the exterior of the roof façade of the switch room

- 4.3. Major noise sources during the noise monitoring included construction activities of Stage 1 of the Project and nearby traffic noise. In addition, for NM3 and NM6, general school activities are also a potential noise source during the noise monitoring.

- 4.4. The number of construction noise monitoring events and exceedances are summarized in Table 4.2 and Table 4.3 respectively.

Table 4.2 Summary of Number of Monitoring Events for Construction Noise

Monitoring Parameter	Location	No. of monitoring events
		Nov 09 – Sep 14
Construction Noise	NM1*	93
	NM1A	160
	NM2	242
	NM3	242
	NM4	242
	NM5	242
	NM6	242
	NM7	242

* NM1 impact construction noise monitoring station was relocated to NM1A on 1 September 2011

Table 4.3 Summary of Number of Monitoring Exceedances for Construction Noise

Monitoring Parameter	Location	Level of Exceedance	Level of Exceedance
			Nov 09 – Sep 14
Construction Noise	NM1*	Limit	0
	NM1A		0
	NM2		0
	NM3		0
	NM4		0
	NM5		0
	NM6		0
	NM7		0
	Total	0	

* NM1 impact construction noise monitoring station was relocated to NM1A on 1 September 2011

- 4.5. All measured construction noise levels were below the Limit level and the graphical plots of the trends of the monitoring results are provided in Appendix E. Twenty-two (22) Action Level exceedances of construction noise were recorded in the reporting period.
- 4.6. There were twenty-two (22) noise-related complaints followed up by the Environmental Team in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. Summaries of investigations are described in Section 7.1 of this report.

5 ENVIRONMENTAL SITE INSPECTION AND AUDIT

- 5.1. Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for Stage 1 of the Project. In the reporting period, 240 and 225 site inspections were carried out for Contract 1 and Contract 2 of the Project respectively.

- 5.2. Particular observations during the site inspections for Contracts 1 and 2 are summarized below:

Air Quality

- 5.2.1. Stockpiles of dusty materials, cement bags and exposed slopes were not properly covered.
- 5.2.2. Dark smoke emission was observed.
- 5.2.3. Mud trails were observed on the public road at the site entrances.
- 5.2.4. The haul road and access road were observed to be dry.
- 5.2.5. Broken concretes were accumulated.

Noise

- 5.2.6. Noise Emission Label (NEL) was missing for air compressors.
- 5.2.7. The breaking tip of working breakers were not wrapped properly with absorptive materials.

Water Quality

- 5.2.8. Leaves, debris, general refuse and silt were accumulated inside the perimeter u-channel.
- 5.2.9. Muddy water was discharged to rivers nearby.
- 5.2.10. Muddy water from vehicle wheel washing facilities overflowed to the public road at the site entrance.
- 5.2.11. Muddy water was accumulated inside the sump pit.
- 5.2.12. Sand bags/bunds were missing at the site boundaries to intercept surface run-off from works areas.
- 5.2.13. Tarpaulin sheet coverage on exposed slopes was incomplete to avoid any soil erosion, especially during rainstorm.
- 5.2.14. Silt was accumulated near the gully.

Chemical and Waste Management

- 5.2.15. Oil stain was observed on the top soil layer and ground.
- 5.2.16. Oil drums and chemical containers were placed on bare ground without drip trays.
- 5.2.17. Chemical containers were not provided with chemical labels.
- 5.2.18. Stockpiles of general refuse and C&D wastes were accumulated.
- 5.2.19. Recycling of wastes was not implemented properly.
- 5.2.20. The drain hole of the drip tray was not plugged to prevent chemical oil leakage.
- 5.2.21. Waste batteries were observed on the ground.

Landscape and Visual Impact

- 5.2.22. Retained trees were not properly fenced off.
- 5.2.23. Ropes and metal wires were tied on retained trees.
- 5.2.24. Waste was found near retained trees.

Miscellaneous

- 5.2.25. Environmental Permit was missing at the site entrance.
- 5.2.26. Stagnant water was observed inside open containers or open areas.

6 SUMMARY AND REVIEW OF NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY

- 6.1. No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring in the reporting period.
- 6.2. One (1) Limit Level exceedance was recorded on 22 March 2010 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.3.
- 6.3. From the information of EPD, the Air Pollution Index (API) at Tai Po exceeded 300 and even reached 500 at some time during the same monitoring period.
- 6.4. Soil nailing works, bore piling and excavation works were carried out on 22/3/2010.
- 6.5. The following dust mitigation measures have been implemented by the Contract 1 Contractor (CSCE):
 - Covering the stockpile of excavated material and slope surface with tarpaulin;
 - Soil was dampened before excavation;
 - Erecting dust screen during soil nail drilling work;
 - Haul roads were dampened by water truck;
 - Vehicle washing facility was provided at vehicle exit points, and every vehicle was washed to remove any dusty materials from its body and wheels before leaving the sites.
- 6.6. While the abovementioned construction activities had been carried out since January 2010 along with the dust mitigation measures implemented, no air quality monitoring exceedance was recorded in previous monitoring works. The dust exceedance was therefore considered not due to the Project works.
- 6.7. One (1) Action Level exceedance was recorded on 2 August 2012 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.8.
- 6.8. From the information of EPD, the Air Pollution Index (API) at Tai Po ranged from 54 to 91 with averaged 66 during the monitoring period.
- 6.9. Excavation for noise barrier footing construction; removal of surplus excavated material off site and bridge parapet; and temporary work for slope stabilization were carried out on 1 August 2012 and 2 August 2012.
- 6.10. The following dust mitigation measures have been implemented by the Contract 1 Contractor (CSCE):
 - Maintaining the soil wet when loading and unloading;
 - Covering the loads of dump trucks;
 - Spraying water continually when breaking concrete;
 - Erection of dust screen; and
 - Paved concrete haul road.
- 6.11. While the abovementioned construction activities have been carried out since June 2012 with the dust mitigation measures implemented, no air quality monitoring exceedance relating to Project works was recorded in previous monitoring works. Moreover, the 24-hr TSP monitoring result on 8 August 2012 was $72.5 \mu\text{g}/\text{m}^3$, which was below the action / limit level, when the abovementioned construction activities were carried out. The dust exceedance was considered not due to the Project works.
- 6.12. No Limit Level exceedance of construction noise was recorded in the reporting period.
- 6.13. There were twenty-two (22) noise-related complaints followed up by the Environmental Team in the reporting period. Hence, twenty-two (22) Action Level exceedances of construction noise were recorded in the reporting period. Investigations were carried out. The findings and the proposed

mitigation measures were submitted to all relevant parties. The summary of investigation is described in Section 7.1.

Summary of Actions Taken in the event of Non-Compliance

- 6.14. In the event of non-compliance, actions were taken in accordance with the Event-Action Plan in the updated EM&A Manual. Investigation was carried out within three working days of identification of non-compliance, checking the implementation status of the mitigation measures, etc. Assessments showed that the monitoring exceedance was not due to the Project works and therefore no further action was required to be taken.

7 ENVIRONMENTAL COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- 7.1. Thirty-nine (39) environmental complaints were followed up by the Environmental Team in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. The summary of investigation is described in Appendix F.
- 7.2. No notification of summons and successful prosecutions was received in the reporting period.
- 7.3. Cumulative statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix F.

8 REVIEW OF THE VALIDITY OF THE EIA/ERR PREDICTION

- 8.1. All the air quality monitoring results in the reporting period were below the Action and Limit Levels established in the baseline air quality monitoring carried out in October and November 2009. The result was in line with the Environmental Impact Assessment (EIA) and Environmental Review Report (ERR) prediction that dust generation would be controlled and would not exceed the acceptable criteria, with proper implementation of the recommended dust mitigation measures.
- 8.2. No construction noise monitoring exceedance was recorded in the reporting period. This is generally in line with the EIA and ERR prediction that with the implementation of noise mitigation measures, the construction noise from the Project works will meet the stipulated criterion at the residential NSRs and at a majority of the education institutions, except that elevated construction noise level at Wong Shiu Chi Middle School (NM3) was predicted by the EIA and ERR.

9 REVIEW OF ENVIRONMENTAL IMPLEMENTATION STATUS

- 9.1. The impact air quality and noise monitoring programme ensured that any environmental impact to the receivers would be readily detected and timely actions could be taken to rectify any non-compliance. The environmental monitoring results indicated that the construction activities in general were in compliance with the relevant environmental requirements and were environmentally acceptable. The weekly site inspection ensured that all the environmental mitigation measures recommended in the EIA/ERR were effectively implemented. Despite the minor deficiencies found during site audits, the relevant contractor had taken appropriate actions to rectify deficiencies within reasonable timeframe. Therefore, the effectiveness and efficiency of the mitigation measures were considered high in most of the time.
- 9.2. For all the parameters under monitoring as mentioned in Section 8, the measured levels were in line with the EIA and ERR predictions generally. This indicates that the mitigation measures were effectively implemented.

10 REVIEW OF EM&A PROGRAMME

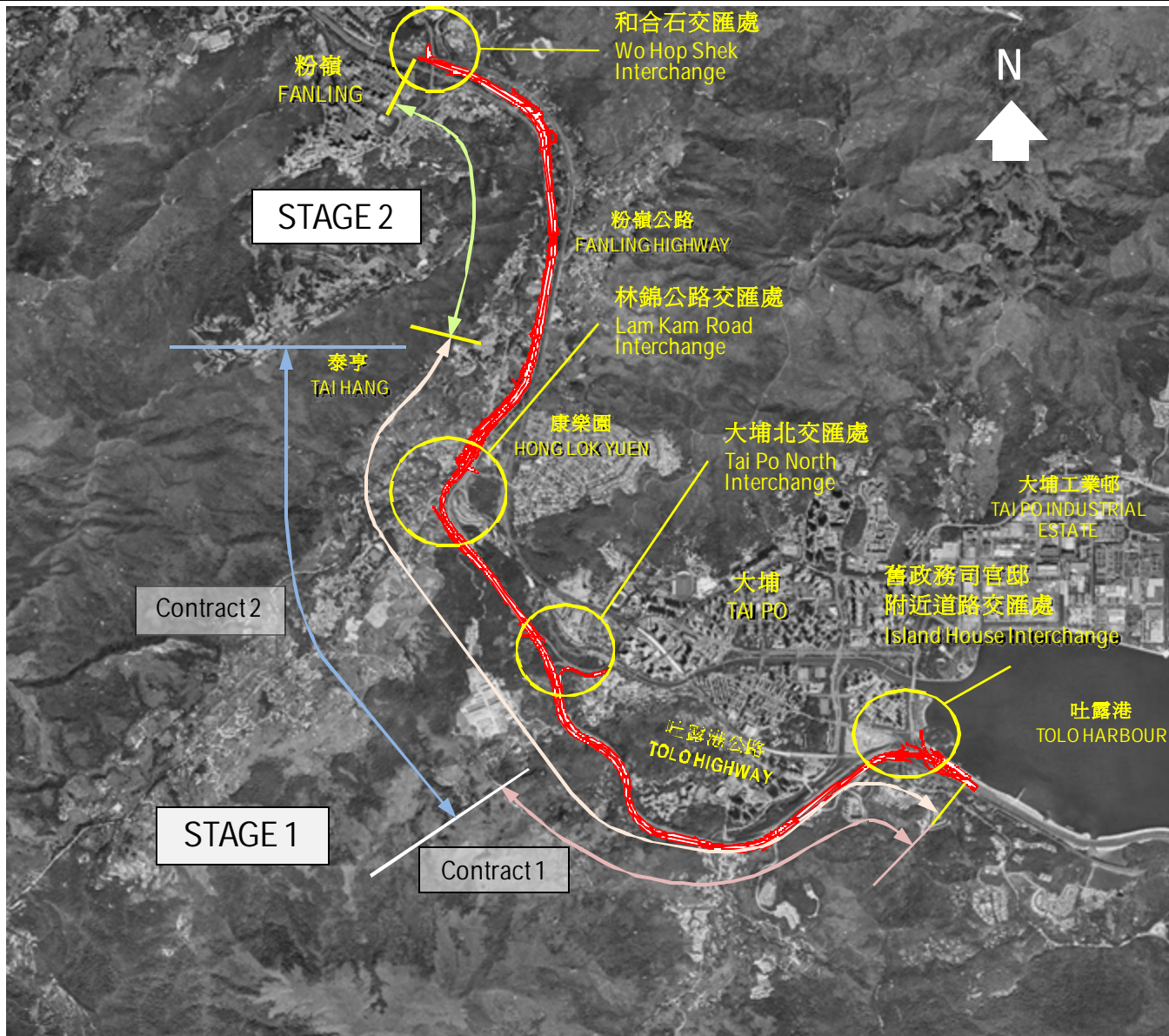
- 10.1. The environmental monitoring methodology was considered well established as the monitoring results were found in line with the EIA predictions.

- 10.2. As effective follow up actions were promptly taken once exceedances were recorded, no further exceedance occurred for each case. The EM&A programme was considered successfully and adequately conducted during the course of the reporting period.

11 CONCLUSIONS

- 11.1. The construction phase EM&A programme of Stage 1 of the Project commenced on 23 November 2009 and substantially completed on 30 September 2014.
- 11.2. Air quality and noise monitoring, and weekly site inspections were carried out in the reporting period, in accordance with the updated EM&A manual.
- 11.3. No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring in the reporting period.
- 11.4. One (1) Limit Level exceedance was recorded on 22 March 2010 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.3.
- 11.5. One (1) Action Level exceedance was recorded on 2 August 2012 for 24-hour TSP monitoring at AM2 in the reporting period. The possible reason for exceedance is listed in Section 6.8.
- 11.6. No Limit Level exceedance of construction noise was recorded in the reporting period.
- 11.7. There were twenty-two (22) noise-related complaints followed up by the Environmental Team in the reporting period. Hence, twenty-two (22) Action Level exceedances of construction noise were recorded in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. The summary of investigation is described in Section 7.1.
- 11.8. Thirty-nine (39) environmental complaints were followed up by the Environmental Team in the reporting period. Investigations were carried out. The findings and the proposed mitigation measures were submitted to all relevant parties. The summary of investigation is described in Section 7.1.
- 11.9. No notification of summons and prosecution was received in the reporting period.
- 11.10. Mitigation measures had been implemented by the Contractors to minimize the environmental impacts due to construction activities. Site inspections carried out by ET and IEC showed that the Contractors rectified the problems observed promptly and no major environmental deficiency was induced. The EM&A programme was considered successfully and adequately conducted during the course of the reporting period.

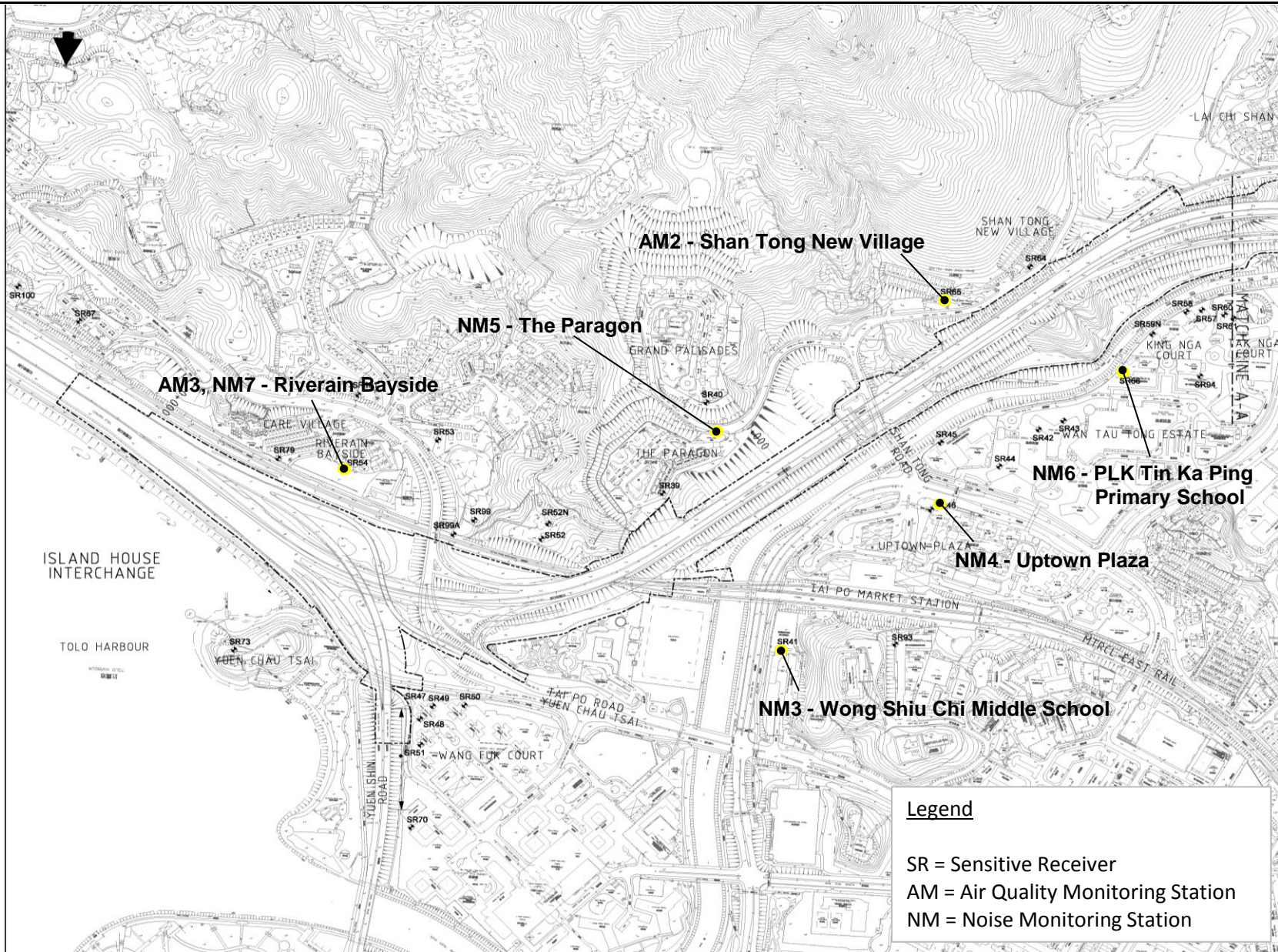
FIGURES



Environmental Team for the Widening of Tolo Highway between
Island House Interchange and Tai Hang - Investigation

General Project Layout Plan

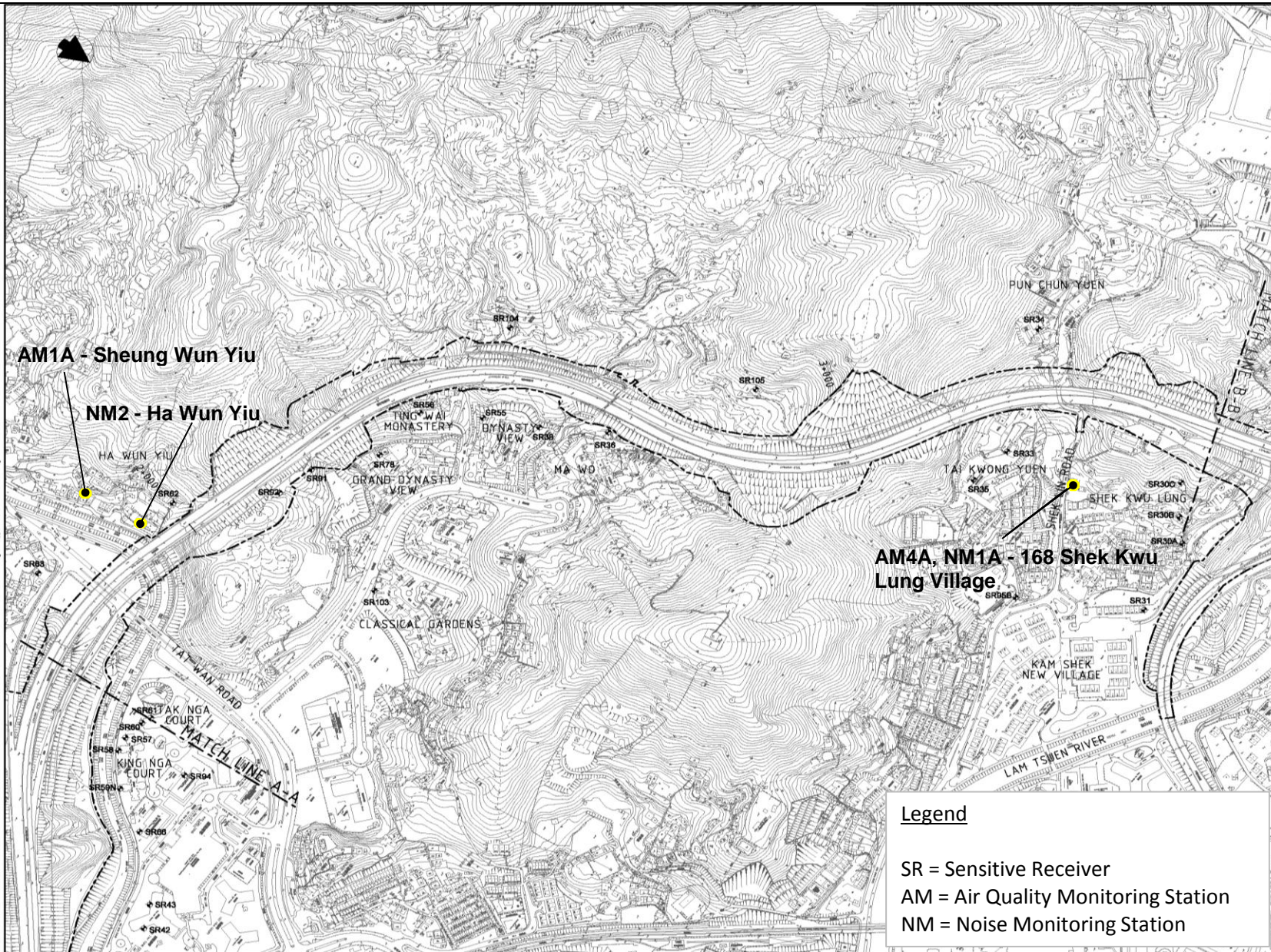
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JOB NO.	60102979	FIGURE NO.	1.1	Rev 0



**Environmental Team for the Widening of Tolo Highway between
Island House Interchange and Tai Hang - Investigation**

EM&A Monitoring Locations (Sheet 1 of 2)

SCALE	N.T.S.	DATE	Sep-11
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JOB NO.	60102979	FIGURE NO.	2.1
			Rev 0

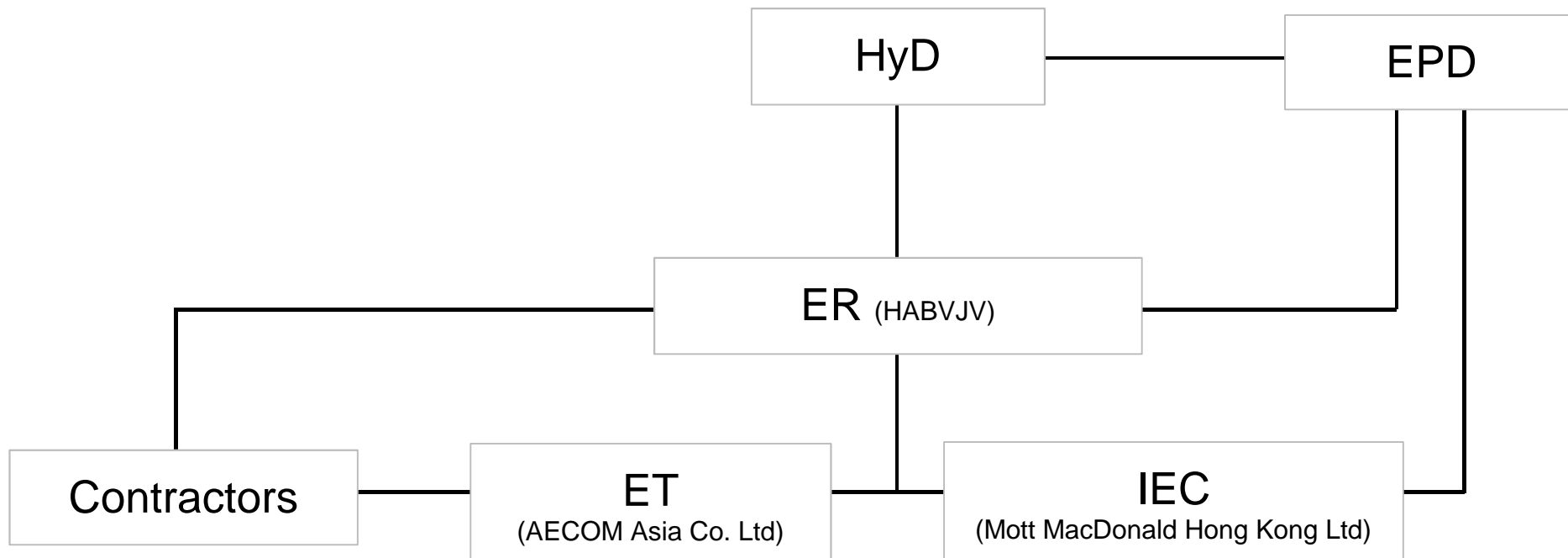


**Environmental Team for the Widening of Tolo Highway between
 Island House Interchange and Tai Hang - Investigation**

EM&A Monitoring Locations (Sheet 2 of 2)

SCALE	N.T.S.	DATE	Sep-11
CHECK	ENFL	DRAWN	LCHC
JOB NO.	60102979	FIGURE NO.	2.1
		Rev	0

**APPENDIX A
PROJECT ORGANIZATION STRUCTURE**



**Environmental Team for the Widening of Tolo Highway between
Island House Interchange and Tai Hang - Investigation**

Project Organization Structure

SCALE	N.T.S.	DATE	2009
CHECK	ENFL	DRAWN	RWHW
JOB NO.	60102979	APPENDIX	Rev
		A	-

**APPENDIX B
IMPLEMENTATION SCHEDULE OF
ENVIRONMENTAL MITIGATION MEASURES
(EMIS)**

Appendix B - Implementation Schedule of Environmental Mitigation Measures (EMIS)

Air Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Air Quality during Construction	<ul style="list-style-type: none"> Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading. 	During construction	V
	<ul style="list-style-type: none"> All stockpiles of excavated materials or spoil of more than 50m³ shall be enclosed, covered or dampened during dry or windy conditions. 		V
	<ul style="list-style-type: none"> Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas. 		V
	<ul style="list-style-type: none"> All spraying of materials and surfaces shall avoid excessive water usage. 		V
	<ul style="list-style-type: none"> Vehicles that have the potential to create dust while transporting materials shall be covered, with the cover properly secured and extended over the edges of the side and tail boards. 		V
	<ul style="list-style-type: none"> Materials shall be dampened, if necessary, before transportation. 		V
	<ul style="list-style-type: none"> Travelling speeds shall be controlled to reduce traffic induced dust dispersion and resuspension within the site from the operating haul trucks. 		V
	<ul style="list-style-type: none"> Vehicle washing facilities shall be provided to minimize the quantity of material deposited on public roads. 		V

Noise - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Noise during Construction	<ul style="list-style-type: none"> Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant. 	During construction	V
	<ul style="list-style-type: none"> Reduce the number of equipment and their percentage on-time. 		V
	<ul style="list-style-type: none"> 3.5 m and 5.5 m high temporary noise barrier at culvert construction work area (Figure 2a of the Environmental Permit). 		V
	<ul style="list-style-type: none"> 3 m high temporary noise barrier along the northern edge of Bridge 12 at ground level (Figure 2b of the Environmental Permit). 		V
	<ul style="list-style-type: none"> 2 m high temporary noise barrier along the northern edge of Bridge 12 at bridge level (Figure 2b of the Environmental Permit). 		V
	<ul style="list-style-type: none"> 2.5 m high temporary noise barrier along Tai Wo Service Road West (Figure 2c of the Environmental Permit). 		V
	<ul style="list-style-type: none"> 3.5m high temporary noise barrier along Tai Wo Services Road West near Tai Hang (Figure2c of the Environmental Permit). 		V

Water Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Water quality during Construction	Demolition and reconstruction of bridges	During construction	
	<ul style="list-style-type: none"> Prevent off-site migration through use of sheet piles. 		V
	<ul style="list-style-type: none"> Minimize duration of works as far as practical. 		V
	<ul style="list-style-type: none"> All sewer and drainage connections should be sealed to prevent debris, soil, sand, etc, from entering public sewers/drains. 		V
	<ul style="list-style-type: none"> Site surface runoff should be settled to remove sand/silt before it is discharged into the existing storm drains. 		V
	River training works		
	<ul style="list-style-type: none"> Inspection and testing of water quality in the nullah on the Tai Po River. 		N/A
	Road Widening Works and Earthworks		
	<ul style="list-style-type: none"> Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settable solids, and pH adjustment as necessary. All sewage discharges from the study area should meet the TM standards and approval from EPD through the licensing process is required. 		V
	<ul style="list-style-type: none"> Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained. 		V
	<ul style="list-style-type: none"> Runoff from exposed working areas, unfinished slopes and from unlined temporary channels should be directed to stilling basins and/or silt traps before discharging to the drainage outfalls. 		V
	<ul style="list-style-type: none"> Regular inspections of stilling basins and/or silt traps are required to ensure that sediment is not conveyed into the existing drainage system. 		V
	<ul style="list-style-type: none"> Open stockpiles should be covered with a tarpaulin cover. 		V
	<ul style="list-style-type: none"> During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded. 		V
	<ul style="list-style-type: none"> Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains. 		V
<ul style="list-style-type: none"> Fuels should be stored in bunded areas such that spillage can be easily collected. 	V		

Waste - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Waste Management during Construction	General Waste	During construction	
	<ul style="list-style-type: none"> Transport of wastes off site as soon as possible. 		V
	<ul style="list-style-type: none"> Maintenance of accurate waste records 		V
	<ul style="list-style-type: none"> Minimization of waste generation for disposal (via reduction/recycling/re-use). 		V
	<ul style="list-style-type: none"> No on-site burning will be permitted. 		V
	<ul style="list-style-type: none"> Use of re-useable metal hoardings/signboards. 		V
	Vegetation from site clearance		
	<ul style="list-style-type: none"> Segregation of materials to facilitate disposal. 		V
	<ul style="list-style-type: none"> Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas. 		V
	Demolition Wastes		
	<ul style="list-style-type: none"> Segregation of materials to facilitate disposal. 		V

• Appropriate stockpile management.	V
Excavated Materials	
• Segregation of materials to facilitate disposal / reuse.	V
• Appropriate stockpile management.	V
• Re-use of excavated material on or off site (where possible).	V
• Special handling and disposal procedures in the event that contaminated materials are excavated.	N/A
Construction Wastes	
• Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles).	V
• Appropriate stockpile management.	V
• Planning to reduce over ordering and waste generation.	V
• Recycling and re-use of materials where possible (e.g. metal, wood from formwork)	V
• For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal.	V
Bentonite Slurries	
• Bentonite slurries should be reused as far as possible.	N/A
• Disposal in accordance with <i>Practice Note For Professional Persons ProPECC PN 1/94</i> .	N/A
Chemical Wastes	
• Storage within locked, covered and bunded area.	V
• The storage area shall not be located adjacent to sensitive receivers e.g. drains.	V
• Minimize waste production and recycle oils/solvents where possible.	V
• A spill response procedure shall be in place and absorption material available for minor spillages.	V
• Use appropriate and labelled containers.	V
• Educate site workers on site cleanliness/waste management procedures.	V
• If chemical wastes are to be generated, the contractor must register with EPD as a Chemical Waste Producer.	V
• The chemical wastes shall be collected by a licensed chemical waste collector.	V
Municipal Wastes	
• Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal.	V
• Regular, daily collections are required by an approved waste collector.	V

Ecology - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Ecology during Construction	Accurate Delineation of Works Area	During construction	
	• Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats.		V
	• Individual trees which fall within the works areas but which work plans show do not require removal are to be retained and fenced off to maximize protection.		V
	Vegetation Clearance		
	• No fires shall be lit within the works area for the purpose of burning cleared vegetation.		V
	• The Contractor shall give consideration to mulching the cleared vegetation for recycling within the works area /	V	

	adjacent land.		
	Dust generation		
	• Vehicle washing facilities to be provided at every discernible or designated vehicle exit point;		V
	• All temporary site access roads shall be sprayed with water to suppress dust as necessary;		V
	• All dusty materials should be sprayed with water immediately prior to any handling; and		V
	• All debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area.		V
	Surface Run-off		
	• Bund and cover stockpiles to avoid run-off;		V
	• Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical;		V
	• All vehicle maintenance to be undertaken within a bunded area; and		N/A
	• Maximize vegetation retention on-site to maximize absorption (minimize transport).		V

Landscape and Visual Impact - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Landscape and Visual Impact during Construction	Preservation of Existing Vegetation	During construction	
	• Trees identified for retention within the project limit would be protected during the works		V
	• The tree transplanting and planting works shall be implemented by approved Landscape Contractors		V
	Temporary Works Areas		
	• Where feasible the works areas would be screened using hoarding and existing vegetation would be retained where possible to reduce the landscape and visual impacts arising from the construction activity. The landscape of these works areas would be restored following the completion of the construction phase.		V
	Hoarding		
	• A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSR's.		V
	Top Soils		
	• The works will result in disturbance to extensive areas of topsoil. Topsoil worthy of retention should be stockpiled for use following completion of the civil engineering works. It should either be temporarily vegetated with hydroseeded grass or turned over on a regular basis.		N/A
Protection of Important Landscape Features			
• Important features such as temples, Island House and kilns within the study area, although remote from the proposed works retained and adequately protected.	V		

Legend: V = implemented;
x = not implemented;
@ = partially implemented;
N/A = not applicable - No such work was undertaken or no such material was used on site.

**APPENDIX C
SUMMARY OF ACTION AND LIMIT LEVELS**

Appendix C - Summary of Action and Limit Levels

Table 1 – Action and Limit Levels for 1-hour TSP

Location	Action Level	Limit Level
AM1A	302.1 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
AM2	301.9 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
AM3	301.9 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
AM4/AM4A	302.3 $\mu\text{g}/\text{m}^3$ *	500 $\mu\text{g}/\text{m}^3$

* Adopted from the Action level of AM4.

Table 2 – Action and Limit Levels for 24-hour TSP

Location	Action Level	Limit Level
AM1A	176.6 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$
AM2	178.6 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$
AM3	193.1 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$
AM4/AM4A	198.5 $\mu\text{g}/\text{m}^3$ *	260 $\mu\text{g}/\text{m}^3$

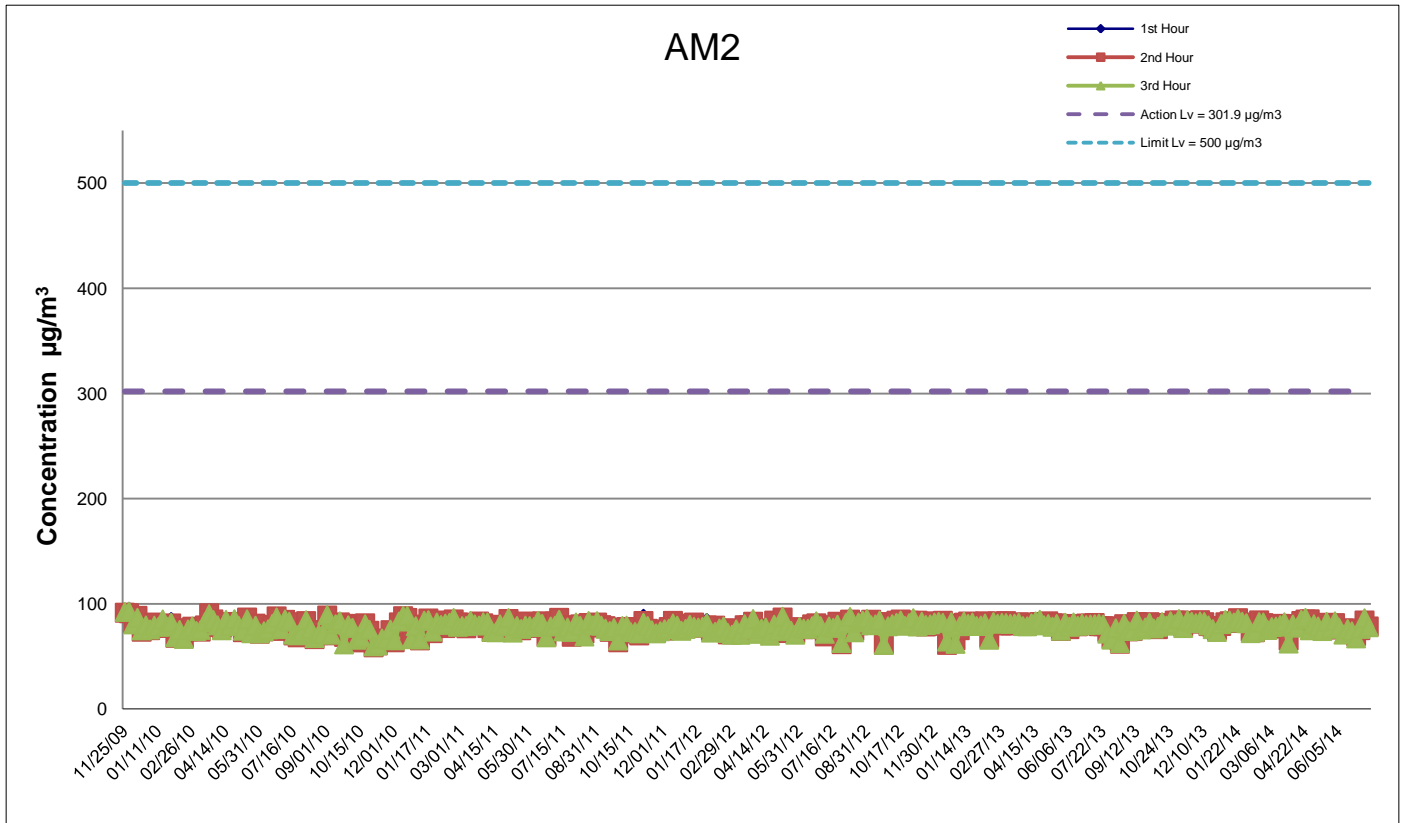
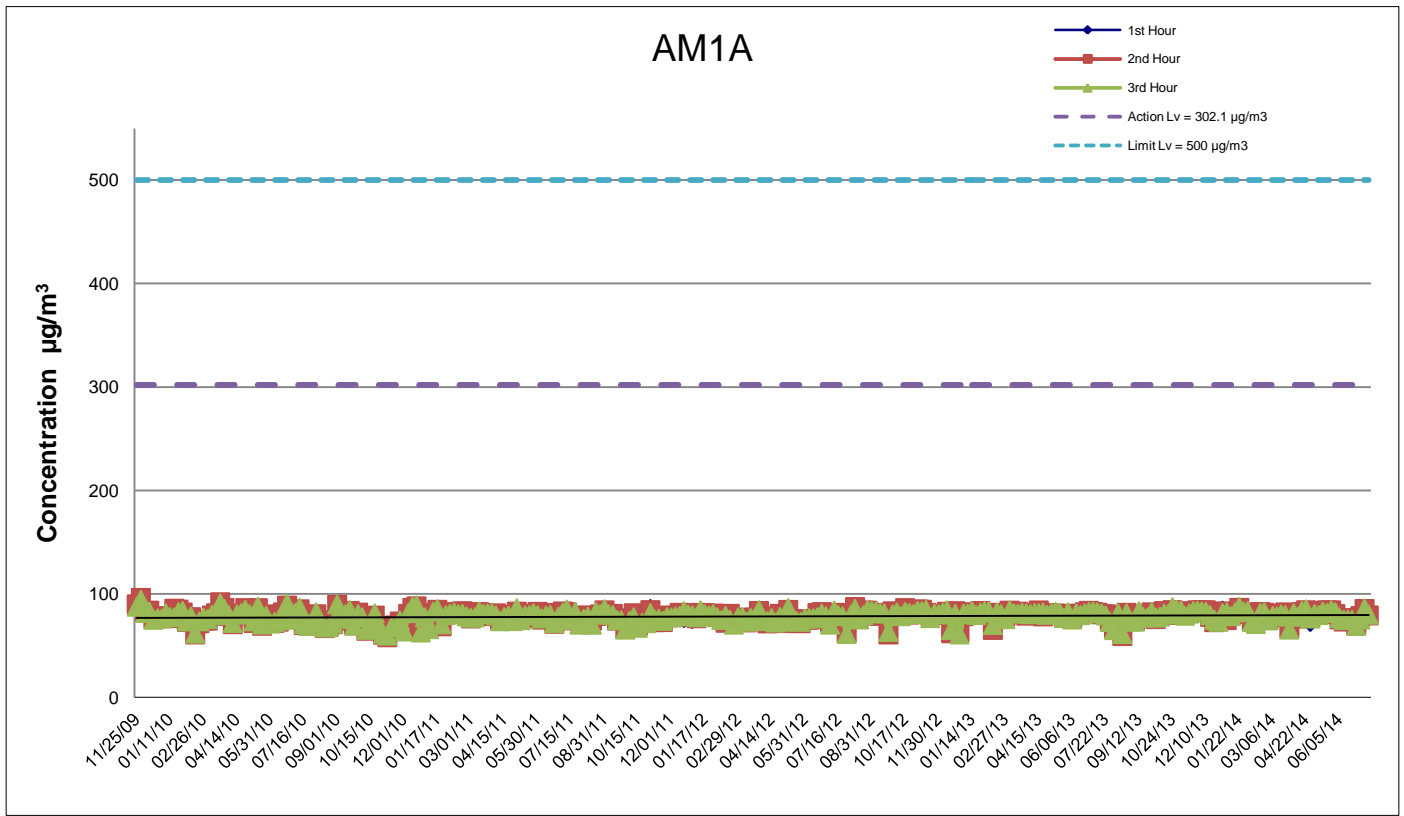
* Adopted from the Action level of AM4.

Table 3 – Action and Limit Levels for Construction Noise (0700-1900 hrs of normal weekdays)

Location	Action Level	Limit Level
NM1	When one documented complaint is received from any one of the sensitive receivers	65/70 dB(A)*
NM1A		75 dB(A)
NM2		75 dB(A)
NM3		65/70 dB(A)*
NM4		75 dB(A)
NM5		75 dB(A)
NM6		65/70 dB(A)*
NM7		75 dB(A)

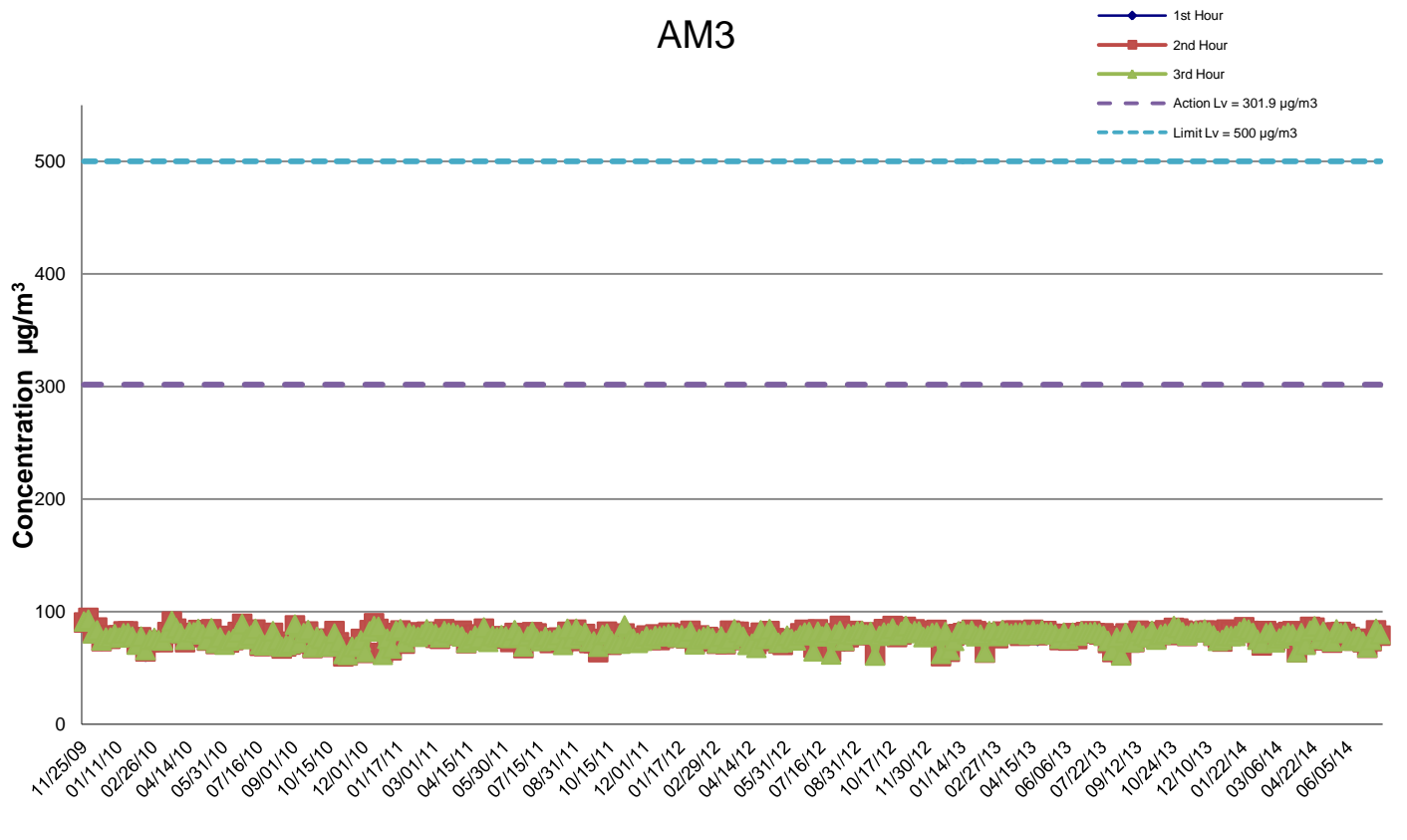
*Daytime noise Limit Level of 70 dB(A) applies to education institutions, while 65dB(A) applies during school examination period

**APPENDIX D
GRAPHICAL PRESENTATION OF IMPACT
AIR QUALITY MONITORING RESULTS**

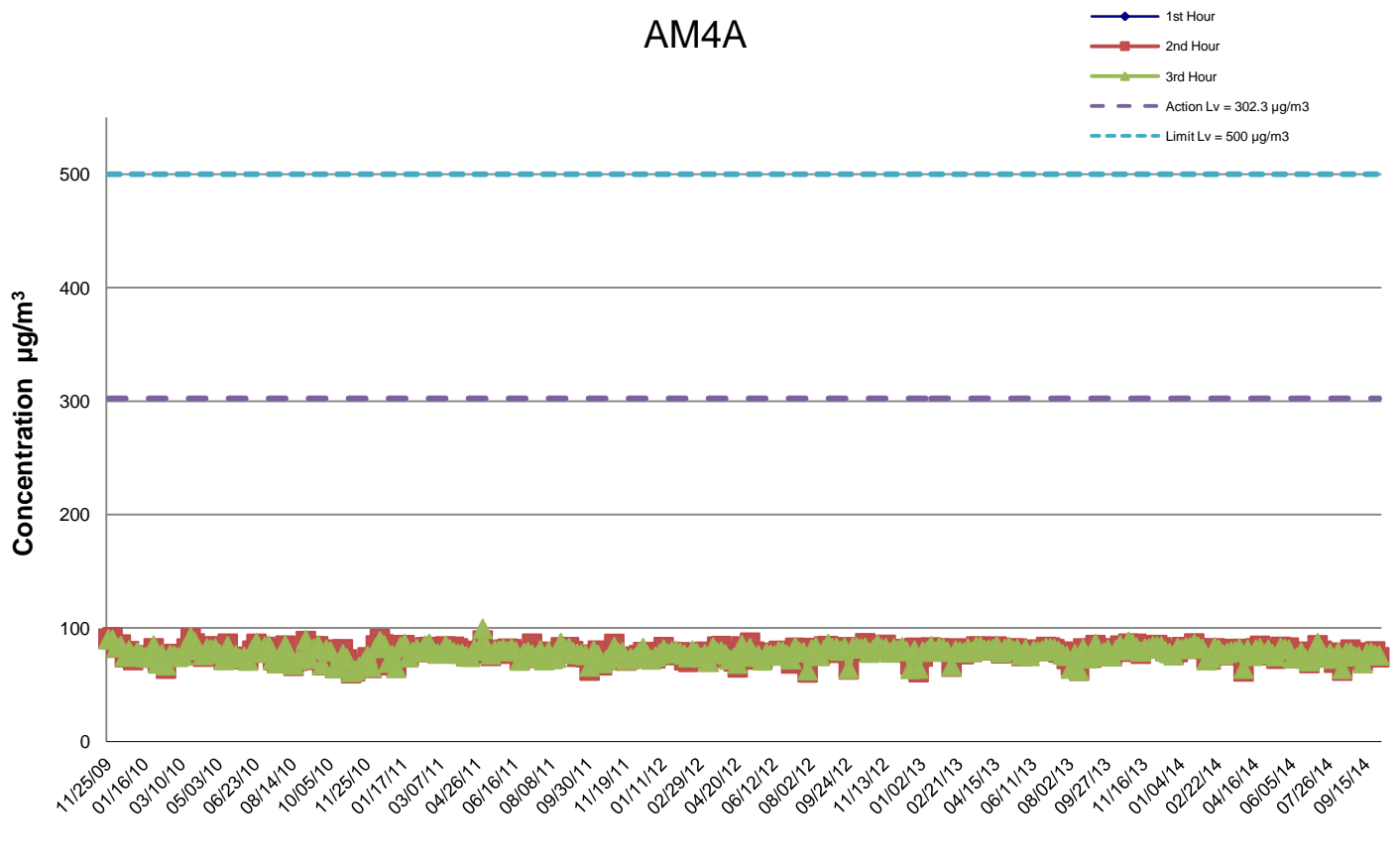


	Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation	SCALE	N.T.S.	DATE	Oct-14
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	Graphical Presentation of Impact 1-hour TSP Monitoring Results	JOB NO.	60102979	APPENDIX No.	Rev.


AM3



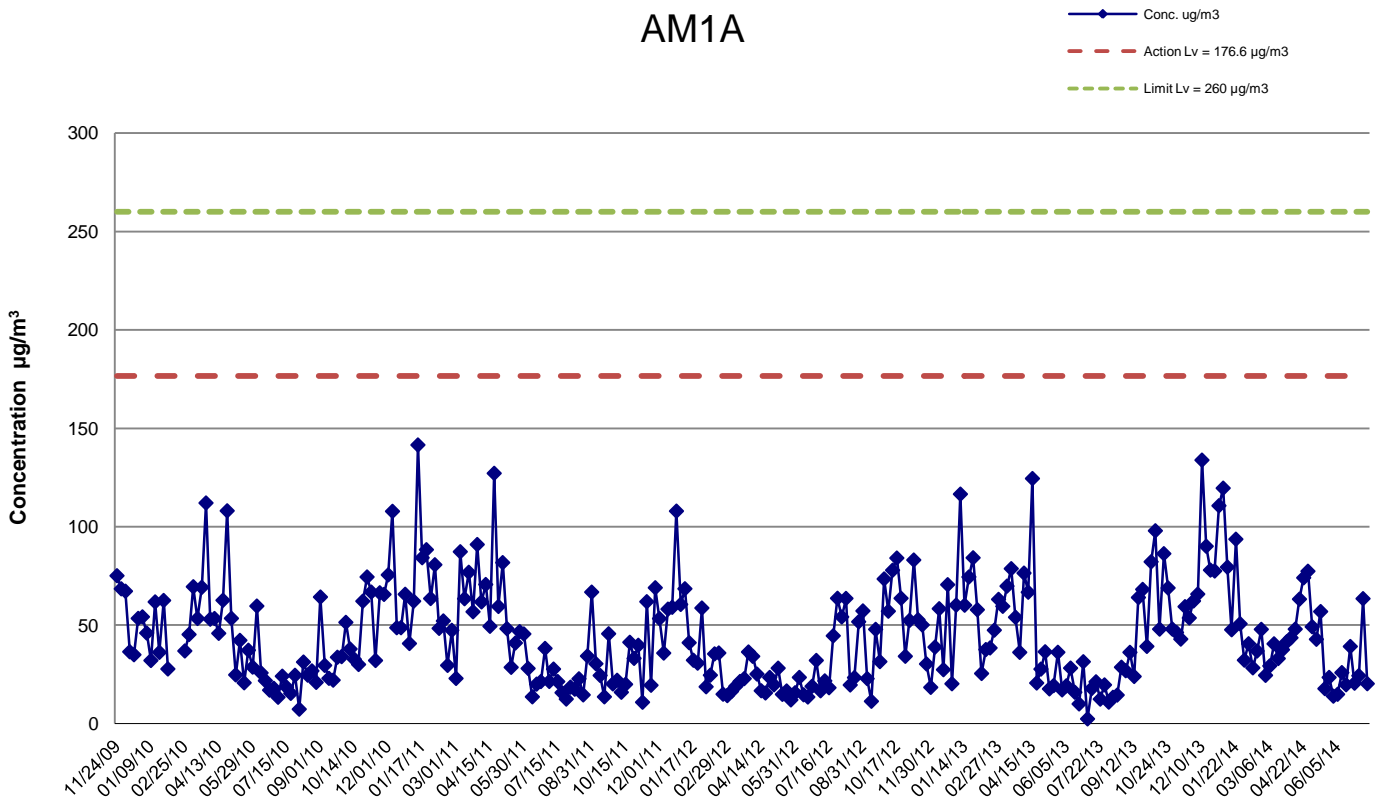
AM4A



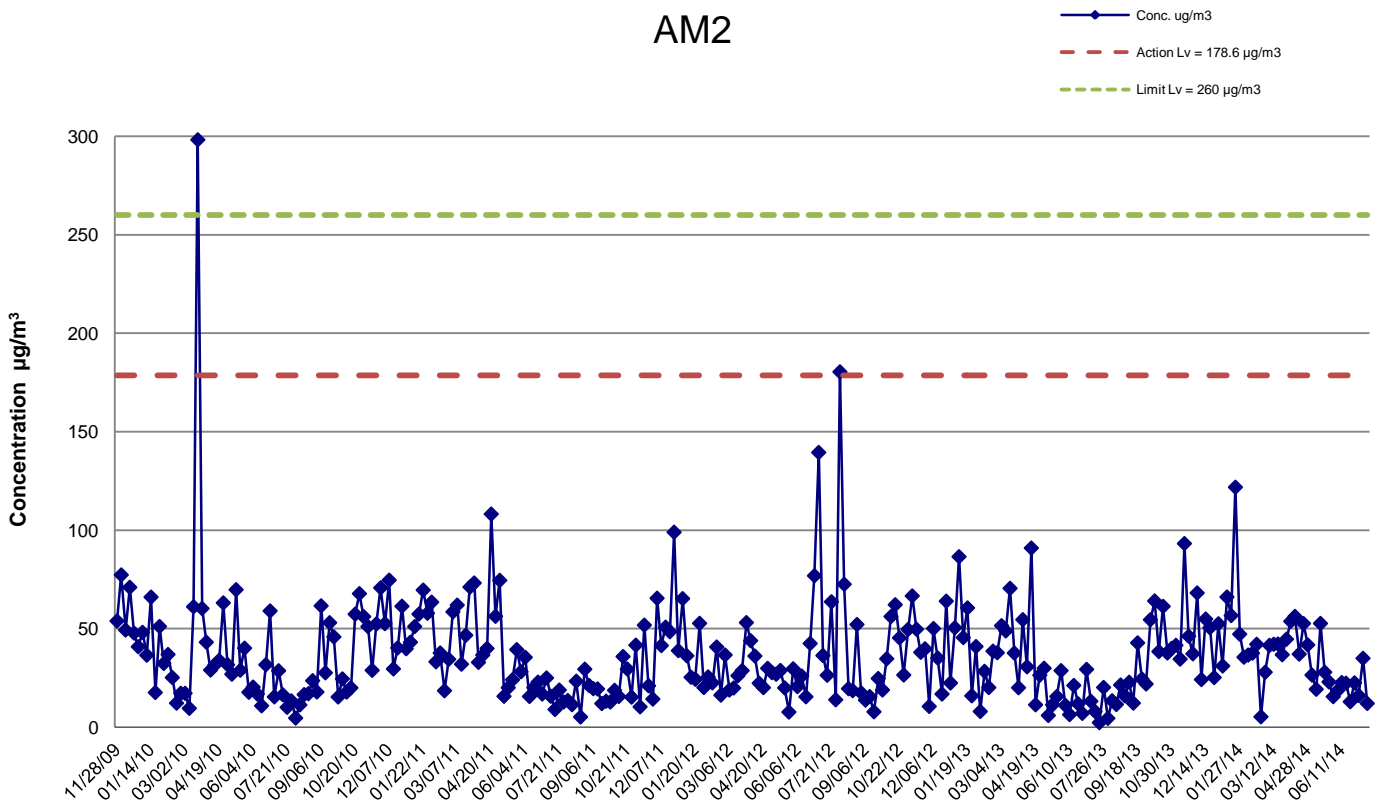
Remark: The monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) starting from 1 September 2011 due to the mentioned school was closed down.

	Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation	SCALE	N.T.S.	DATE	Oct-14
	Graphical Presentation of Impact 1-hour TSP Monitoring Results	CHECK	ENFL	DRAWN	JCYK
		JOB NO.	60102979	APPENDIX No.	
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AM1A



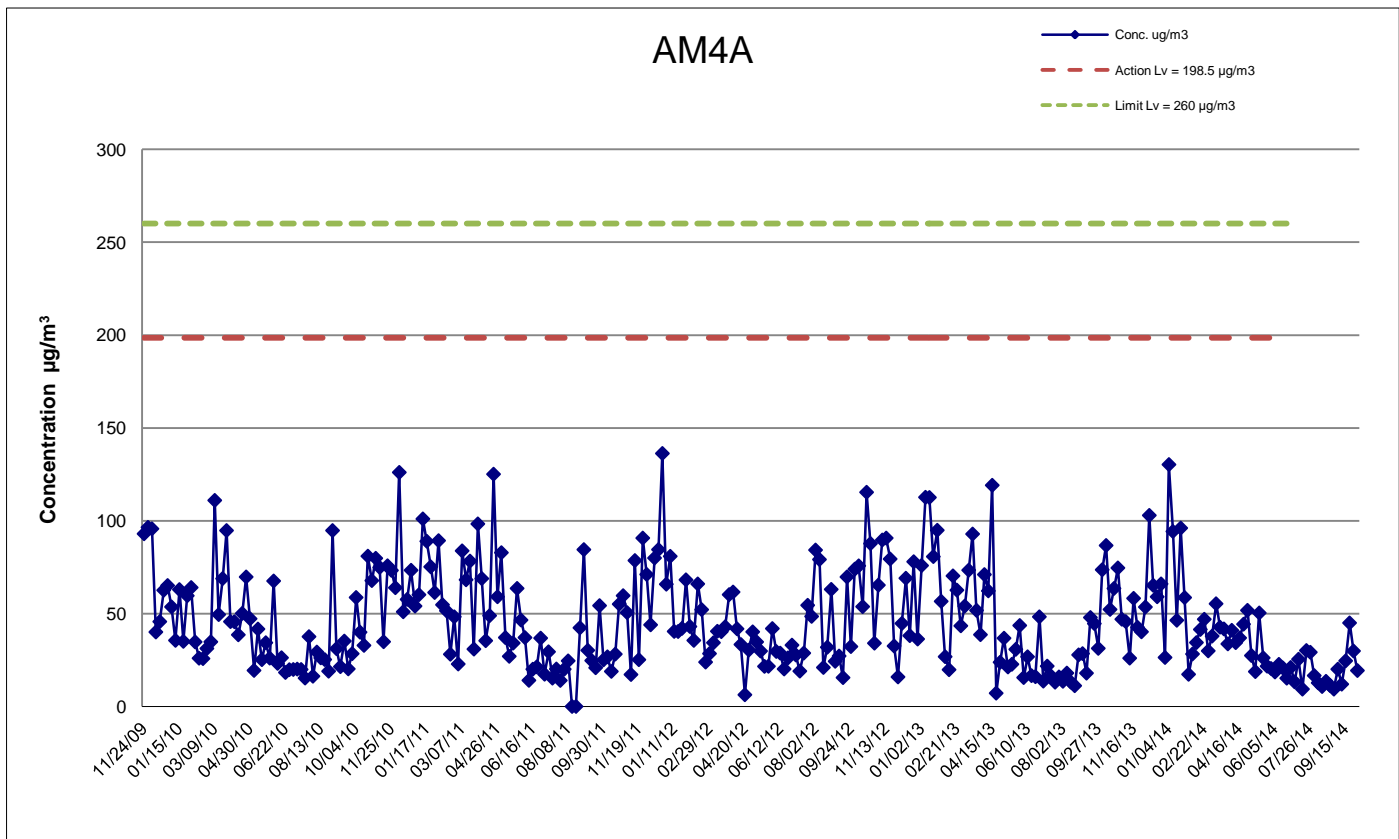
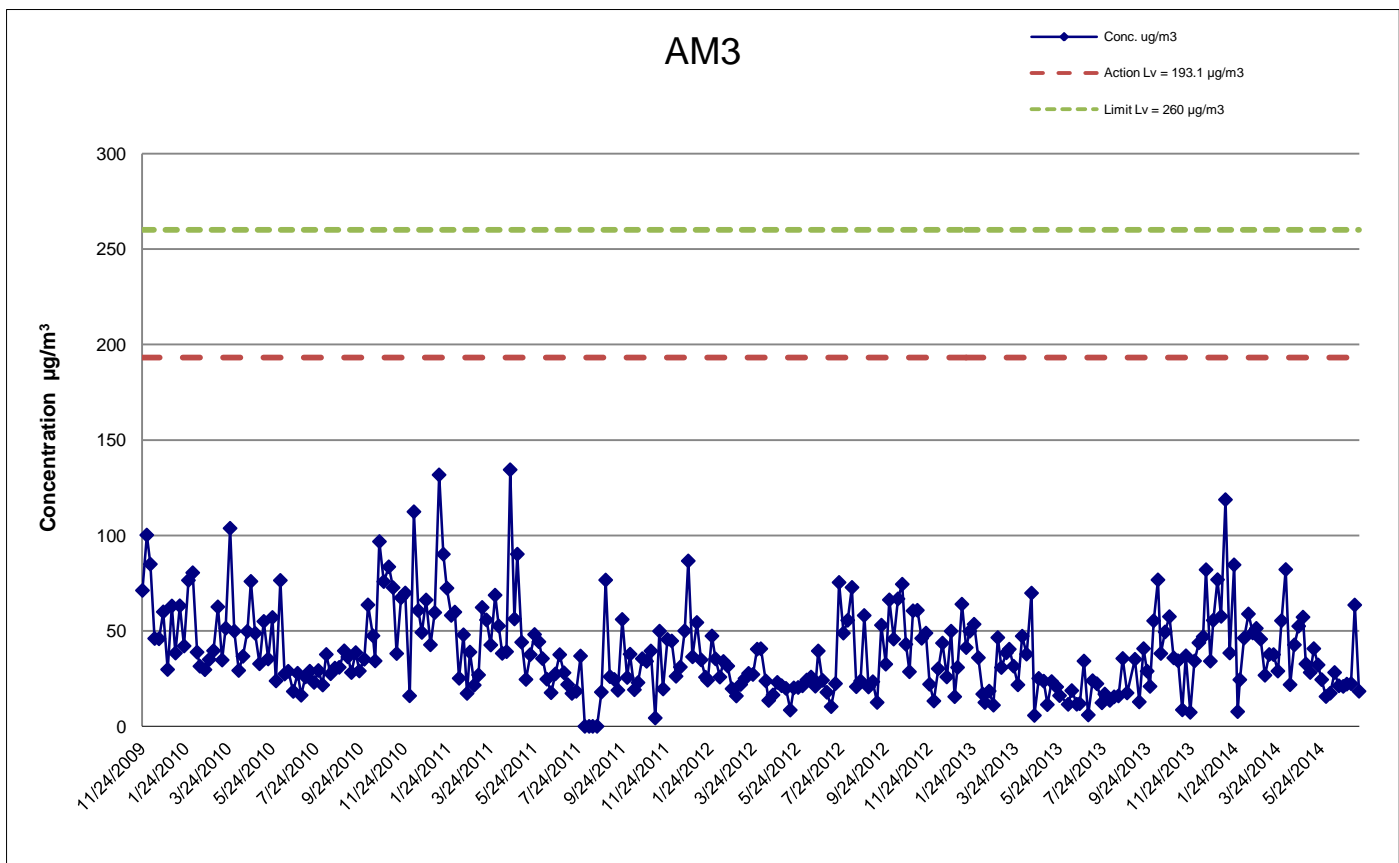
AM2



Environmental Team for the Widening of Tolo Highway
between Island House Interchange and Tai Hang - Investigation

Graphical Presentation of Impact 24-hour TSP Monitoring
Results

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JOB NO.	60102979	APPENDIX No.	Rev.
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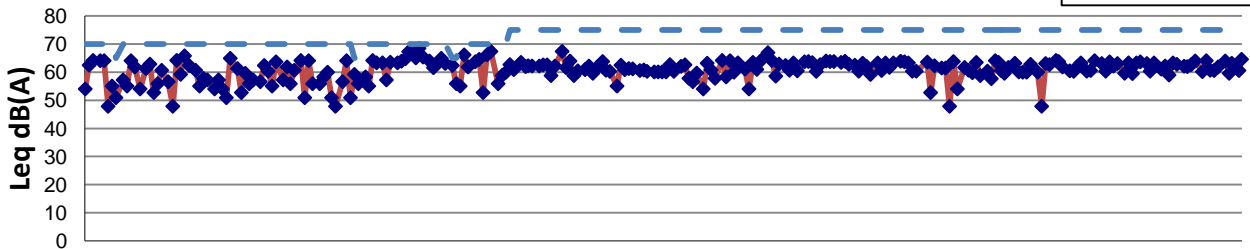


Remark: The monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) starting from 1 September 2011 due to the mentioned school was closed down.

	Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation	SCALE	N.T.S.	DATE	Oct-14
		CHECK	ENFL	DRAWN	JCYK
	Graphical Presentation of Impact 24-hour TSP Monitoring Results	JOB NO.	60102979	APPENDIX No. D	Rev. -

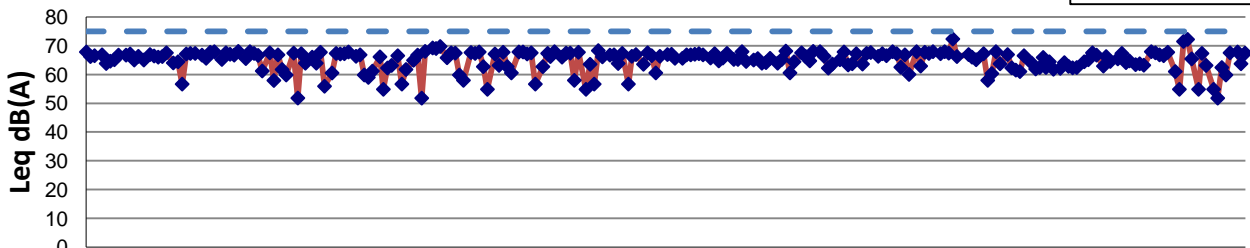
**APPENDIX E
GRAPHICAL PRESENTATION OF IMPACT
DAYTIME CONSTRUCTION NOISE
MONITORING RESULTS**

NM1 / NM1A



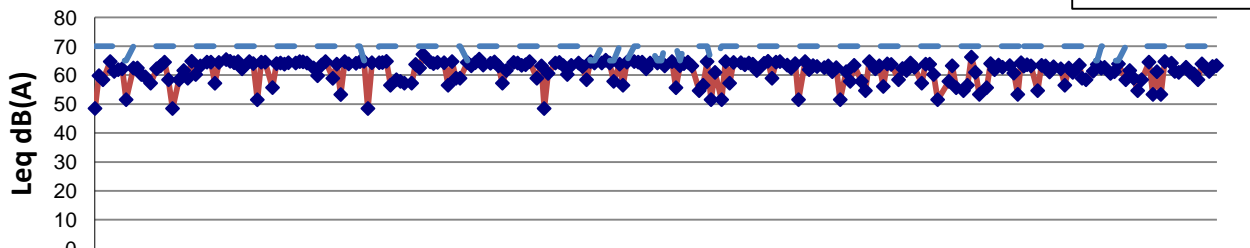
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NM2




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NM3

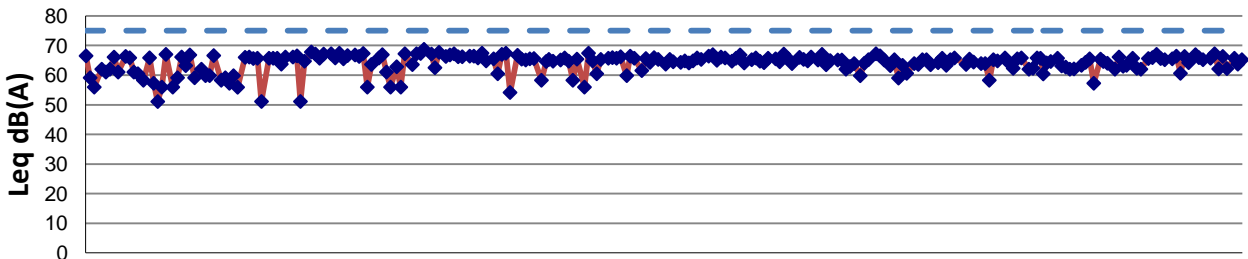


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Remarks: (1) The monitoring station at Tai Kwong Secondary School (NM1) was relocated to 168 Shek Kwu Lung Village (NM1A) starting from 1 September 2011 due to the mentioned school was closed down;
 (2) Measured noise level would be shown if Measured noise level (Leq) <= Baseline noise level

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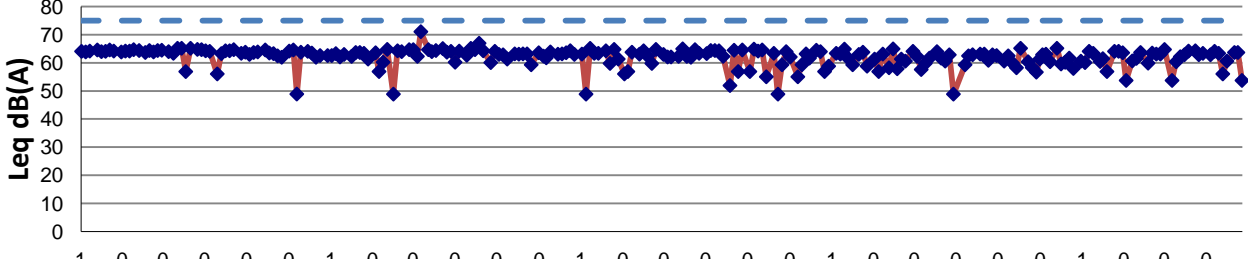
NM4



—●— Noise data
- - - - - Limit Lv = 75 dB(A)

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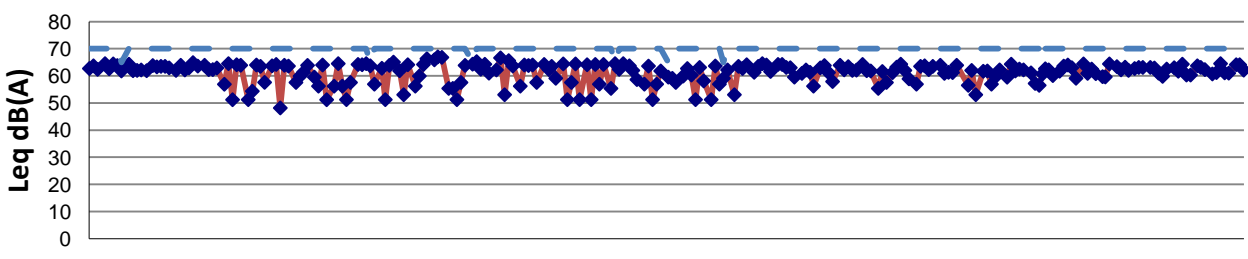
NM5



—●— Noise data
- - - - - Limit Lv = 75 dB(A)

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NM6



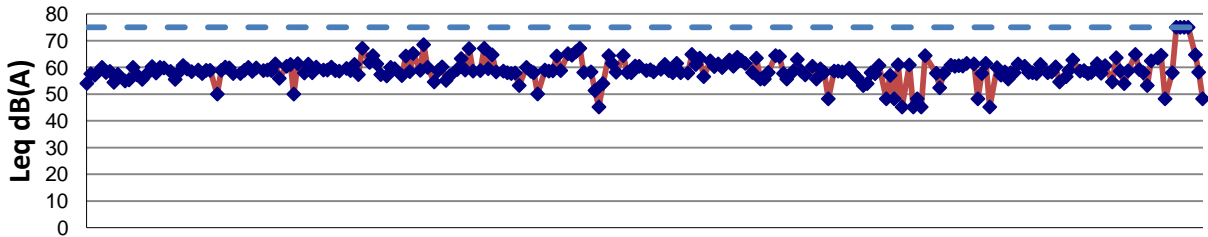
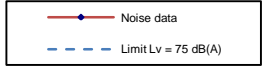
—●— Noise data
- - - - - Limit Lv = 65/70 dB(A)

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Remark: Measured noise level would be shown if Measured noise level (Leq) <= Baseline noise level

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NM7



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Remark: Measured noise level would be shown if Measured noise level (Leq) <= Baseline noise level

	Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation	SCALE	N.T.S.	DATE	Oct-14	
		CHECK	ENFL	DRAWN	JCYK	
	Graphical Presentation of Impact Daytime Construction Noise Monitoring Results	JOB NO.	60102979	APPENDIX No.	I	Rev.

**APPENDIX F
CUMULATIVE STATISTICS ON
COMPLAINTS, NOTIFICATIONS OF
SUMMONS AND SUCCESSFUL
PROSECUTIONS**

Appendix F

Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. followed up by ET since project commencement
Environmental Complaints	6 November 2012	EPD referred a complaint (from a resident of The Paragon) about the suspected construction noise generated from the suspected construction activities at Tolo Highway on 4 November 2012 at 3:00 a.m.	Closed	39
	8 November 2012	EPD referred a telephone complaint from the a resident of Ma Wo at Tai Po about no reduction in the dust nuisance from the road widening construction works by Gammon Construction Ltd. Despite repeated request of frequent water spraying at the entrance of the construction site, such measures were only implemented during senior site staff inspections. Fugitive dust was generated for the rest of the time, causing serious nuisance to the complainant's dwelling. The complainant thereby strongly requested the EPD to monitor the status of water spraying of the construction site.	Closed	
	13 November 2012	EPD referred a complaint about construction noise generated from breaking activities at the construction site of Gammon Construction Ltd. near Lot no. 450 of Wai Tau Tsuen at Lam Tsuen of Tai Po. The	Closed	

		complainant expressed that the noise from the breaking activities began between 8:00am and 9:00am on 30 October 2012 at the construction site of Gammon Construction Ltd. near Lot no. 450 of Wai Tau Tsuen at Lam Tsuen of Tai Po, causing nuisance to nearby residents. The complainant requested the EPD to follow up as soon as possible. The complainant expressed that the complainant would call the police for help if the problem of construction noise could not be handled by the day after the receipt of complaint. The reply had been communicated to the complainant. However, the complainant expressed that construction activities were still carried out by the Contractor after 7:00pm and noise was still generated from construction works. The complainant thereby requested the EPD to follow up and reply again.		
	29 November 2012	EPD referred a complaint from a resident of Shek Kwu Lung Village about the construction of Widening of Tolo Highway at the foot of the hill slope. According to the complainant, the construction works have been conducted by Gammon Construction Ltd. for a year and the works had been conducted until 20:00 at night in recent months. Due to the short distance of the complainant's premises from the construction site, the nuisance was very annoying. The complainant requested EPD to follow up.	Closed	
	14, 17 & 21	EPD referred a complaint, from a resident at Ma Wo, about dust	Closed	

	December 2012	<p>emission in construction site of the Tolo Highway widening construction works at Ma Wo. The complainant contacted the Contractor (Gammon Construction Ltd.) on 14 December 2012 and the Contractor promised that water-spraying would be provided at the entrance of the construction site. Although the complainant waited for 5 hours, no water-spraying was provided by the Contractor. Fugitive dust was generated and caused serious nuisance to the complainant's dwelling.</p> <p>Subsequently, the complainant made another call on 17 December 2012 saying that an EPD personnel contacted him in the morning on 17 December 2012. However, still no water-spraying was provided by the Contractor in the construction site on 17 December 2012. Fugitive dust generated overwhelmed the entrance of complainant's dwelling. The complainant thereby requested the EPD to follow up and reply the complainant as soon as possible.</p> <p>Afterwards, the complainant also made other call on 21 December 2012 strongly complaining that there are no water-spraying provided in the construction site as requested by EPD and caused continuous dust nuisance to the complainant.</p>		
	24 December 2012	EPD referred a complaint about hammering noise generated from construction activities at the construction site for bridge construction	Closed	

		<p>at Lam Kam Road and Tai Wo Service Road West (near Wai Tau Tsuen) during the period from 00:00 to 06:00 in recent two weeks, causing nuisance to nearby residents. The complainant had called the Police before. However, the police expressed that as Construction Noise Permit (CNP) had been issued by the EPD for the construction works, the complaint could not be handled by the Police and requested the complainant to contact EPD. The complainant was strongly dissatisfied. It was because the EPD issued the CNP for the construction works but no government staff was observed to be on site to monitor the noise. The complainant objected the issuance of the CNP and strongly requested replies and follow-up as soon as possible.</p> <p>The complainant expressed if the construction works were still carried out at night time again, he would lodge the complaint to the Director and he would contact the Media immediately for reporting.</p>		
	24 December 2012	<p>EPD referred a complaint about noise nuisance generated from construction activities, at the construction site for bridge construction between Lam Kam Road and Tai Wo Service Road West at mid-night on Monday to Friday and ongoing for two weeks, caused nuisance to Wai Tau Tsuen. The complainant called the Police before and found out the related Construction Noise Permit (CNP) in EPD's website. However, the complainant did not provide the reference number of</p>	Closed	

		the CNP. The Complaint requested the Highways Department to stop the construction works as soon as possible.		
	11 January 2013	EPD referred a noise complaint from a resident of Ha Wun Yiu. According to complainant "C", the complainant's dwelling located at Ha Wun Yiu Village was very close to Tolo Highway. The complainant expressed that the road surface of Tolo Highway was uneven. When heavy vehicle passed through the road, strong sound and noise, like explosion, were produced. The noise seriously affected the complainant. Although the complainant had complained this issue to Highways Department before, noise barriers were still not installed and no improvement was observed. The complaint requested follow-up.	Closed	
	30 January 2013	On 28 January 2013, Highway received a water complaint from a citizen regarding muddy water discharged from construction site nearby Tai Wo Estate to Lam Tsuen River, which contaminated the river water on 26 January 2013. The contaminated river water would flow to Tolo Harbour causing water quality impact.	Closed	
	5 March 2013	EPD referred a noise complaint from a resident of Parc Versailles. The complainant expressed that it was very noisy when vehicles passed through Tolo Highway towards Tai Po North in a direction to Yuen Long, causing impact on the residents. The complainant requested to construct noise barrier.	Closed	

	10 April 2013	EPD referred a noise complaint from a resident of Wang Fuk Court at Tai Po. The complainant expressed that the construction work during midnight at Tolo Highway disturbed resident's sleep.	Closed	
	25 April 2013	EPD referred a complaint about dust emission in construction site of the Tolo Highway widening construction works at Shek Kwu Lung. The complainant expressed that there were about seven to eight trucks unloading the rocks at Shek Kwu Lung on 25 April 2013, fearing that it would generate fugitive dust if the mentioned activities were carried out without the use of hoarding and water-spraying.	Closed	
	7 October 2013	EPD referred a complaint about dust emission in construction site of the Tolo Highway widening construction works at Ma Wo, causing nuisance to the complainant.	Closed	
	4 November 2013	EPD referred a noise complaint from a resident living near Uptown Plaza at Tai Po. The complainant expressed that the construction work during midnight at Tolo Highway disturbed the resident's sleep on 4 November 2013.	Closed	
	13 December 2013, 22 January, 27 February & 25 March 2014	EPD referred a complaint from a resident of Ma Wo Tsuen about the dust emission at the construction site of the Tolo Highway widening construction works at Ma Wo. The complainant has complained about the air pollution problem for three years and that no improvement has been seen.	Closed	

		<p>The complainant stated that there are no water sprinklers in the construction site and the residents of Ma Wo Tsuen have requested the Contractor to use tarpaulin sheets.</p> <p>EPD referred a follow-up complaint from a resident of Ma Wo on 22 January 2014. The complaint is about the dust emission at the construction site of the Tolo Highway widening construction works at Ma Wo on 21 January 2014 afternoon and 22 January 2014 morning. The complainant complained that there was insufficient water spraying and tarpaulin sheets were not used. He expressed that the air pollution problem has caused nuisance to him for three years. He requests improvements by the Contractor and follow-up by the EPD.</p> <p>EPD referred a follow-up complaint from a resident of Ma Wo on 27 February 2014. The complainant said that the Contractor caused serious noise nuisance at non-restricted hours.</p> <p>EPD referred a follow-up complaint from a resident of Ma Wo Tsuen on 25 March 2014.</p> <p>The complaint is about the dust emission at the construction site of the Tolo Highway widening construction works at Ma Wo. The complainant complained that there was insufficient water spraying, so</p>		
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		dust was generated and serious nuisance was caused. He expressed that he has complained for three years and no improvement has been observed.		
	13 January 2014	EPD referred a noise complaint on 13 January 2014 from a resident living in Grand Palisades at Tai Po. The complainant complained about the persistent construction noise emitted between late-night hours on Saturdays and early morning of Sundays at Tolo Highway.	Closed	
	21 January 2014	EPD referred a complaint on 21 January 2014. The complainant drove via Tai Po Tai Wo Road section of Tolo Highway on 21 January 2014 morning. He observed a lot of muddy water generated from the Tolo Highway widening construction works. Besides, he saw from Google Earth Image Satellite that a pipe was used to draw water for ground washing, causing the outflow of muddy runoff. As the mud on the road becomes dry, dust is generated when vehicles are passing by. The complainant requests follow-up as soon as possible.	Closed	
	15 April 2014	EPD referred a complaint from a resident of Ma Wo Tsuen on 15 April 2014. The complaint was about the dust emission on 12 April 2014 at the construction site of the Tolo Highway widening construction works at Ma Wo. The complaint location was Ma Wo Tsuen near Northbound of Tolo Highway. The complainant complained that there was no water spraying or covering by tarpaulin sheets when the construction works were taking place. Serious dust nuisance has	Closed	

		been caused. He claimed that no improvement has been observed. He requested the follow-up by the EPD.		
	20 June 2014	EPD referred a complaint concerning a construction site of the Widening of Tolo Highway Project (Stage 1) near Wan Tau Tong Estate, opposite to Hong Kong Teachers' Association Lee Heng Kwei Secondary School, on 23 June 2014. The complaint is regarding muddy water discharged from the construction site into Tai Po River on 20 June 2014.	Closed	
Notifications of Summons	-	-	-	0
Successful Prosecutions	-	-	-	0