



Contract No. YL/2013/01

**Cycle Tracks from Tuen Mun to Sheung
Shui-Stage 1**

Monthly EM&A Report for December 2014

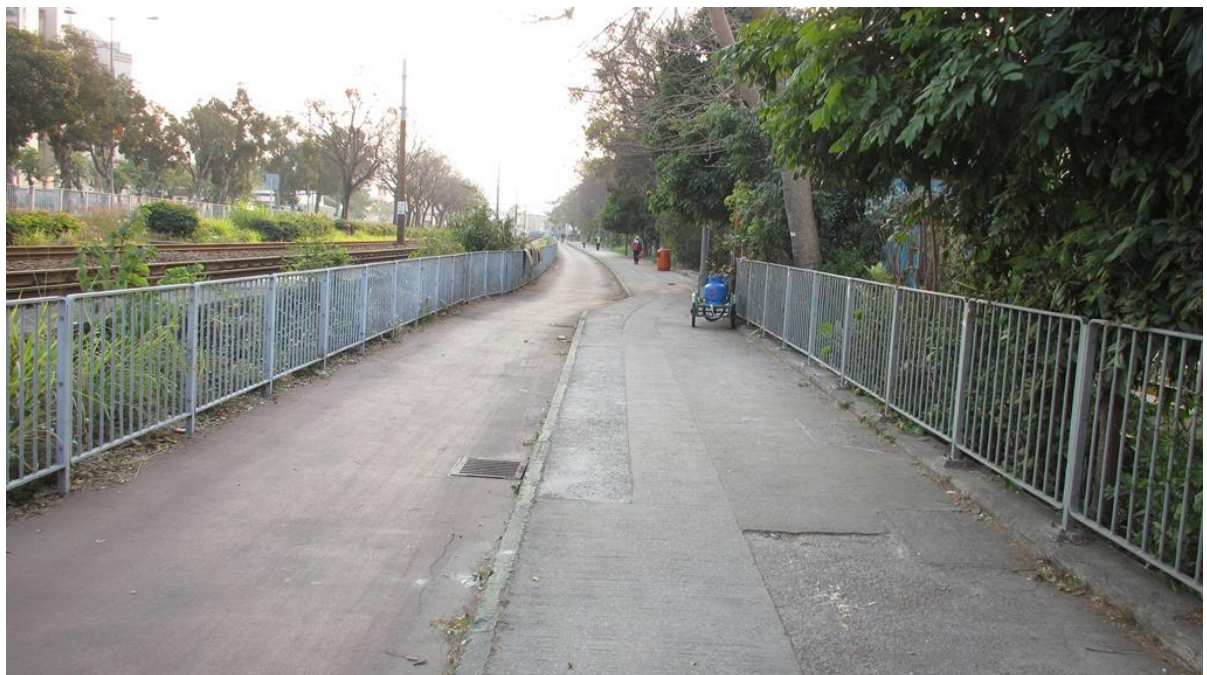
(Designated Project Works Area)

Prepared for:
Civil Engineering and
Development Department

HONG KONG



Jan 2015



REVISION SCHEDULE

Rev	Date	Details	Prepared by	Reviewed by	Approved by
0	12 January 2015	EM&A Report No. 8 – December 2014	Desmond Lee	Rodney Ip	Harold Insley
Signature					

REVISION RECORD

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0	12 January 2015	EM&A Report No. 8 – December 2014	Desmond Lee	Rodney Ip	Harold Insley

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ABBREVIATION

CEDD	Civil Engineering and Development Department
C&D	Construction & Demolition
CNP	Construction Noise Permit
EM&A	Environmental Monitoring and Audit
EMP	Environmental Management Plan
EPD	Environmental Protection Department
ET	Environmental Team
IEC	Independent Environmental Checker
NSR	Noise Sensitive Receiver
NT	New Territories
PME	Powered Mechanical Equipment
RE	Resident Engineer
TTS#	Trip-ticket System

EXECUTIVE SUMMARY

The ET of URS Hong Kong Ltd was commissioned by CEDD to undertake the EM&A programme for the Contract No. YL/2013/01 entitled “Cycle Tracks from Tuen Mun to Sheung Shui” for the designated project works area (the Project). Environmental Permits have been required by the EPD for this project.

This Monthly Environmental Monitoring and Audit Report No. 8 contains the results and findings of site inspection activities and EM&A works carried out by the Works Contractor as required in the contract during 1 December 2014 to 31 December 2014.

Construction Progress

The construction works of the Project was commenced in 28 April 2014.

The site activities in the reporting period mainly consisted of tree felling and transplantation, site clearance works, excavation works and construction of retaining walls.

Site Inspections

Environmental site inspections were conducted on 1 December, 11 December, 16 December, 22 December and 29 December 2014.

Several environmental issues have been identified by the ET during inspections including leak of tarpaulin cover on exposed stockpiles, storage of materials next to existing trees and transplanted trees, oil spill from generator, untidy site area, leak of drip tray for temporary chemical storage, trees maintained and protected not well.

The Contractor has implemented mitigation measures to address most of those problems. However during the site inspection, it is identified that there should be improvement on the mitigation measures taken by the Contractor to the transplanted trees maintenance and protection. Follow-up Transplanted Trees Condition Survey has been agreed to be carried out by the Contractor. On-going investigations will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in the following month.

Environmental Complaints, Notices, Summons and Remedial Action

There were no complaints from EPD & no summons notifications were received during the above said report period.

Environmental Monitoring

According to the “Construction of Cycle tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River Stage 1 Environmental Review EM&A Manual (2013) (EM&A Manual 2013), no air, water and noise monitoring is required.

According to Section 4 of the EM&A Manual 2013, no noise monitoring was specified. In this connection, setting up of Action/ Limit Levels is not required.

Construction Programme for Coming Month

Planned activities for 1 January 2015 to 31 January 2015 of the Project consist of:

- 1) Portion D:
 - Construction of Retaining Wall
- 2) Portion E:
 - Construction of Retaining Wall
 - Backfilling of Retaining Wall
- 3) Portion M:
 - Construction of Stream Decking
 - Construction of Cycle Track
 - Construction of Retaining Wall

Reporting Changes

In the reporting period, there was no reporting change of circumstances which may affect the compliance with the recommendations of the EIA Report.

Future Key Issues

Considering the nature of construction activities, key environmental issues in the coming months include the followings:

- Protection of Trees;
- Production of solid waste;
- Production of dust;
- Production of Noise; and
- Production of site run off

1. BASIC PROJECT INFORMATION

1.1. Introduction

- 1.1.1. URS Hong Kong Ltd has been commissioned by CEDD as ET for the construction works of ‘Contract No. YL/2013/01 Cycle Track from Tuen Mun to Sheung Shui – Stage 1’ (the Project). The Project commenced in November 2013 and is scheduled for completion by the end of 2016.
- 1.1.2. The site layout plans and the construction programme are shown in [Appendix 1](#) and [Appendix 2](#) respectively
- 1.1.3. The Project comprises the following primary works elements:
- Construction of a new cycle track (with footpath) section from near Yuen Long Sha Po Tsuen connecting to the end of the existing cycle track, along Castle Peak Road – Tam Mi Section and along Pok Wai South Road (namely “Section 1”).
 - Construction of a new cycle track (with footpath) section from near Ho Sheung Heung along Sheung Yue River and Shek Sheung River connecting to the existing cycle track in Sheung Shui (“namely “Section 1b”).
 - Construction of the associated support facilities including two Resting Stations - R5 and R9 integrated with Information Kiosk
 - The associated streetscape, landscape, utilities diversions, traffic aids installation, street lighting, water, sewerage and drainage works;
 - Provision of environmental mitigation measures.
- 1.1.4. The Project is regulated under the Environmental Permit no. EP-450/2013 (EP). According to the EP, the monitoring and audit programme shall be implemented in accordance with the procedures and requirements as set out in the EIA Report and EM&A Manual (Register No. AEIAR–133/2009) & the “Construction of Cycle tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River Stage 1 Environmental Review EM&A Manual (2013) (EM&A Manual 2013).
- 1.1.5. This EM&A report is prepared in accordance with Section 12.3 of the EM&A Manual to records the results of regular site inspections, once per week, which identified environmental impacts & verification of implementation of the mitigation measures as recommended in the EM&A Manual, the Contractor’s EMP. The report is to be submitted to the ER, the Contractor, the IEC and EPD.
- 1.1.6. The contact persons and telephone numbers of key personnel are shown in [Appendix 3](#).

1.2. Project Organization and Management

1.2.1. The Project Organization Chart of the ET is shown in **Figure 1.1.**

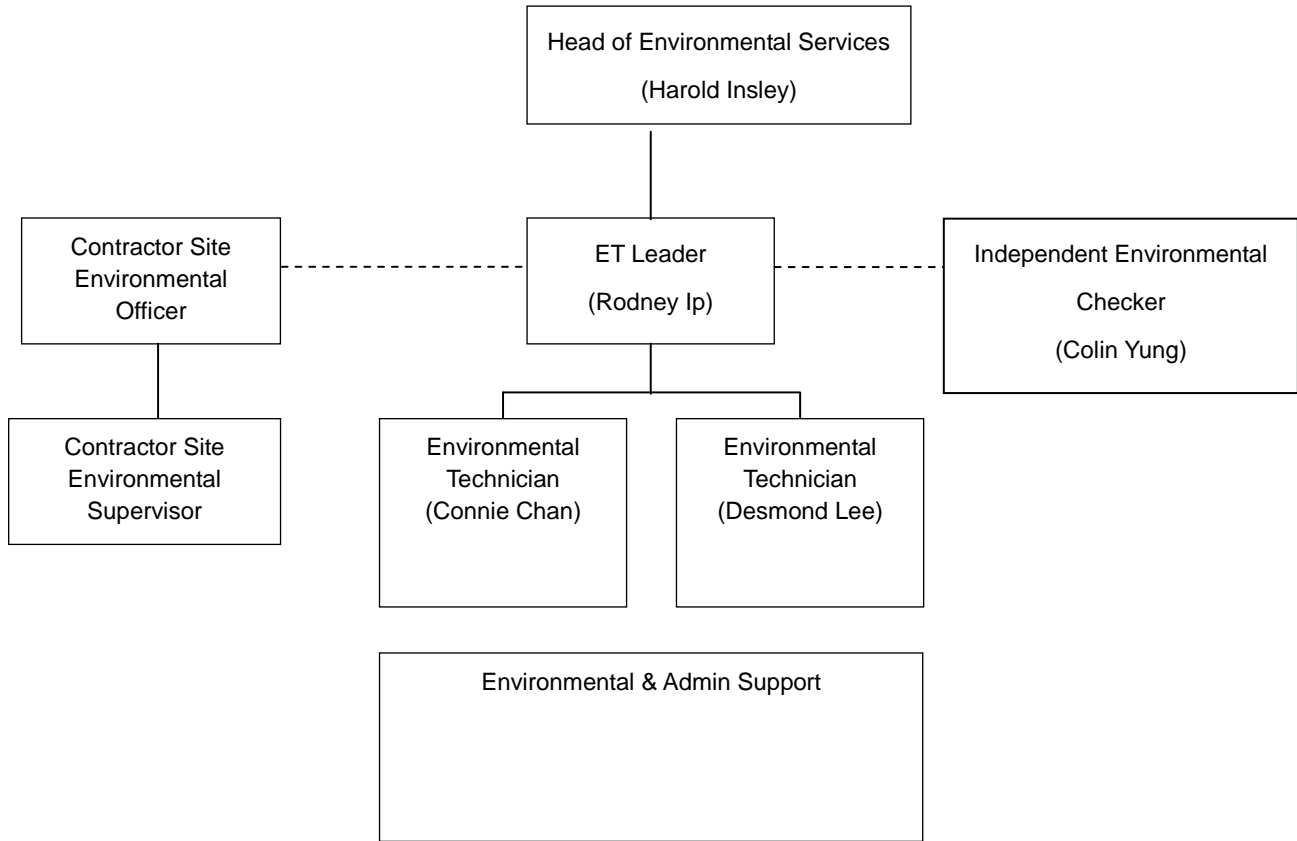


Figure 1.1 Organization Chart of ET

2. SUMMARY OF WORK ACTIVITIES AND CONSTRUCTION STATUS

2.1. Works Undertaken during the Reporting Month

2.1.1. The main construction works in this reporting month relate to tree felling and transplantation, site clearance works, excavation works and construction of retaining walls and cycle tracks.

2.1.2. A summary of the works in this reporting month, with the information of locations, activities, equipment/materials and dates of occurrence, is provided by the Contractor, as shown in **Table 2.1**. Locations can be referred to **Appendix 1**.

Table 2.1 Work Activities for This Reporting Month

Location	Activities	Environmental Impact(s)	Proposed Mitigation Measures
Portion D (Sheung Yue River)	Site Clearance Excavation for Construction Construction of Retaining Wall No. 2, 4 (Concreting, Formworks, Steelworks)	Protection of Trees Production of solid waste Production of dust Production of Noise Production of dusty site run off	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS#; Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided
Portion E (Shek Sheung River)	Construction of Retaining Wall No.1, 5, 8 (Concreting, Formworks, Steelworks)	Protection of Trees Production of solid waste Production of dust Production of Noise Production of dusty site runoff	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS#; Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided
Portion M (Kam Tin River)	Site Clearance Tree Felling and Transplant Construction of Cycle Track Construction of Retaining Wall	Protection of Trees Production of solid waste Production of dust Production of Noise Production of dusty site run off	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS#; Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided

Future Key Issues

2.1.3. The Contractor has provided an updated construction program in [Table 2.2](#) to show the planned activities for the coming two months (January & February 2015). The anticipated environmental issues are summarised as follows:

Table 2.2 Planned Activities for the Coming Two Months (January & February 2015)

Location	Activities	Environmental Impact(s)	Proposed mitigation Measures
Portion D (Sheung Yue River)	Excavation for Construction of Retaining Wall No. 2, 4 Construction of Retaining Walls (Concreting, Formworks, Steelworks)	Protection of Trees Production of solid waste Production of dust Production of Noise Production of site run off	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS# Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided
Portion E (Shek Sheung River)	Construction of Retaining Walls RW 1, 5, 8 (Concreting, Formworks, Steelworks) Backfilling of Retaining Wall	Protection of Trees Production of solid waste Production of dust Production of Noise Production of site run off	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS# Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided
Portion M (Kam Tin River)	Construction of Retaining Walls (Concreting, Formworks, Steelworks) Construction of Cycle Track Construction of Stream Decking	Protection of Trees Production of solid waste Production of dust Production of Noise Production of site run off	No soil, materials or equipment shall be stockpiled within the tree protection zones Implementing TTS# Spray water to minimize dust condition Works should not be commenced during restricted hours Existing structures can be used to reduce noise Temporary noise baffles/ screen to noisy machines has been provided Extra sand bags and silt traps shall be provided

- 2.1.4. The site inspection schedule for the next month (1 January to 31 January 2015) is designated on 5 January, 15 January, 20 January, and 26 January 2015.

3. STATUS OF ENVIRONMENTAL PROTECTION AND SITE INSPECTIONS

3.1. Environmental Requirements

Air Quality

- 3.1.1. The EM&A Manual (2013) identified that no significant impacts could arise during construction and operation of the project. No specific construction dust monitoring was recommended in the EM&A Manual (2013) given proper implementation of the dust control measures under the Air Pollution Control (Construction Dust) Regulation. General air quality control measures are recommended for implementation as good site practice.

Noise

- 3.1.2. The EM&A Manual (2013) identifies that with the use of quiet / silenced PME and noise barriers, where applicable, will result in no unacceptable construction noise. General noise control measures are recommended for implementation as good site practice. No NSR has been identified within 300m of the site working areas and no noise exceedance within the stage 1 designated project works areas were predicted based on the Environmental Review findings, therefore no noise monitoring is recommended under the EM&A Manual (2013).
- 3.1.3. No construction is planned during restricted hours. If construction is required during restricted hours the Contractor is required to apply for a CNP.

Water Quality

- 3.1.4. The EM&A Manual (2013) identifies that best practicable pollution control measures during construction should be effective to control the potential water quality impacts resulting from stormwater runoff into receiving waters. Water Discharge License has been applied by the Contractor.
- 3.1.5. According to the EM&A Manual (2013), no water quality monitoring is considered necessary within stage 1 designated project works areas based on the Environmental Review findings.

Waste Management

- 3.1.6. The EM&A Manual (2013) identifies that with proper on-site handling and storage (covered containers), reuse (of inert construction wastes) and off-site disposal (via approved waste collectors to approved waste facilities and/or disposal grounds) the generation, handling and disposal of these wastes will not give rise to any adverse environmental impacts. Control and mitigation should be implemented as general good site practices.
- 3.1.7. The quantities of waste for disposal from the construction site in this month are summarized in **Table 3.1**.

Table 3.1 Summary of Quantities of Waste for Disposal in this Reporting Month

Type of Waste		Quantity
Inert C&D Materials	Total Quantity Generated (in '000m ³)	0
	Hard Rock and Large Broken Concrete (in '000m ³)	0
	Reused in the Contract (in '000m ³)	0
	Reused in other Projects (in '000m ³)	0
	Disposed as Public Fill (in '000m ³)	0
C&D Waste	Metals (in '000kg)	0.01
	Paper/cardboard packing (in '000kg)	0.01
	Plastic (in '000kg)	0.01
	Chemical Waste (in '000kg)	0
	Others, e.g. general refuse (in '000m ³)	0.015

Land Contamination

- 3.1.8. The EM&A Manual (2013) considers that no specific EM&A requirements are necessary for Land Contamination.

Ecology and Fisheries

- 3.1.9. The EM&A Manual (2013) identifies that no significant overall loss of valuable ecological habitat and fishponds and it is considered that no significant negative impacts to surrounding habitats and species and aquaculture or water quality will arise from the construction and operation of the cycle track given that appropriate mitigation measures and good practices are properly implemented. No specific ecological or fisheries monitoring is required.

Cultural Heritage

- 3.1.10. The EM&A Manual (2013) identifies that no adverse impacts on cultural heritage resources would be expected from the construction or operational phase of the Project. No specific monitoring is required during the construction phase. However, care has been taken during construction stage to report any signs of possible discovery of artefacts to minimize potential impacts during the construction phase.

Landscape and Visual

- 3.1.11. Based on the EM&A Manual's recommendation, all measures undertaken during the construction stage shall be audited by the Landscape Architect as a member of the Environmental Team. The site inspections were undertaken for twice a month during this reporting period to ensure all the recommended landscape and visual mitigation measures have been effectively implemented.

3.2. Environmental Site Inspections

- 3.2.1. Environmental site inspections are required to inspect the construction activities of the Project in order to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented. Regular site inspections should be carried out once per week during the construction phase.
- 3.2.2. Regular weekly environmental walk records with follow up actions of this reporting period have been attached in [Appendix 5](#) and have been filed by RE in Site Office .
- 3.2.3. The Contractor has implemented mitigation measures to address most of those problems. However during the site inspection, it is identified that there should be improvement on the mitigation measures taken by the Contractor to the issue of transplanted trees maintenance and protection. Follow-up Transplanted Trees Condition Survey has been agreed to be carried out by the Contractor. On-going investigation will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in the following month.
- 3.2.4. A summary of the findings and results of site inspections are provided in [Table 3.2](#).

Table 3.2 Summary of Findings from Site Inspections

Item No.	Date of Inspection	Location	Situation Requiring Follow up Action	Rectification Measures	Date of Actions Taken
1	1 Dec 2014	Portion M (Kam Tin River)	Materials and waste were stocked next to existing trees	Material and waste have been removed	5 Jan 2015
2	1 Dec 2014	Portion E (Shek Sheung River)	Exposed stockpiles were not covered by tarpaulin	Follow-up actions are required	-
3	1 Dec 2014	Portion E (Shek Sheung River)	Materials and waste were stocked next to existing trees	Follow-up actions are required	-
4	11 Dec 2014	Portion M (Kam Tin River)	Oil spill at the bottom of generator	Generator has been repaired and the contaminated soil has been removed as chemical waste	5 Jan 2015
5	11 Dec 2014	Portion M (Kam Tin River)	Materials and waste were stocked next to existing trees	Material and waste have been removed	14 Dec 2014
6	11 Dec 2014	Portion M (Kam Tin River)	Exposed stockpiles were not covered by tarpaulin	Exposed slopes and stockpiles were covered by cement or tarpaulin	14 Dec 2014
7	16 Dec 2014	Portion M (Kam Tin River)	Site was not kept clean and tidy	Follow-up actions are required	-
8	16 Dec 2014	Portion M (Kam Tin River)	Exposed stockpiles were not covered by tarpaulin	Follow-up actions are required	-
9	16 Dec 2014	Portion M (Kam Tin River)	Oil spill at the bottom of generator	Item No.4	5 Jan 2015

Item No.	Date of Inspection	Location	Situation Requiring Follow up Action	Rectification Measures	Date of Actions Taken
10	16 Dec 2014	Portion E (Shek Sheung River)	Materials and waste were stocked next to existing trees	Follow-up actions are required	-
11	22 Dec 2014	Portion M (Kam Tin River)	Site was not kept clean and tidy	Item No.7	-
12	22 Dec 2014	Portion M (Kam Tin River)	Exposed stockpiles were not covered by tarpaulin	Item No.8	-
13	22 Dec 2014	Portion M (Kam Tin River)	Oil spill at the bottom of generator	Item No.4	5 Jan 2015
14	22 Dec 2014	Portion E (Shek Sheung River)	Materials and waste were stocked next to existing trees	Item No.10	-
15	29 Dec 2014	Portion D (Sheung Yue River)	Drip tray was not provided for temporary chemical storage	Follow-up actions are required	-
16	29 Dec 2014	Portion D (Sheung Yue River)	Materials and waste were stocked next to transplanted trees	Follow-up actions are required	-
17	29 Dec 2014	Portion E (Shek Sheung River)	Trees were not protected and maintained as required	Follow-up actions are required	-
18	29 Dec 2014	Portion E (Shek Sheung River)	Materials and waste were stocked next to trees	Item No.10	-

4. SUMMARY OF ENVIRONMENTAL PERMIT AND LICENCES

4.1.1. The Summary of Environmental Permits/Licenses required for the Project is summarised in [Table 4.1](#).

Table 4.1 Summary of Environmental Permits/ Licenses

Item No.	Description	Date of Issue	Ref. No	Date of Expiry
1	Environmental Permit (EP)	30/5/2013	EP-450/2013	N.A.
2	Registration as a Chemical Waste Producer	10/1/2014	WPN5213-524-S3777-01	N.A.
3	Effluent Discharge License	25/2/2014	W5/11384/1	28/2/2019
4	Billing Account for Disposal of Construction Waste	16/12/2013	7018953	N.A.
5	Construction Noise Permit	N.A.	N.A.	N.A.

5. CUMULATIVE LOG OF COMPLAINTS, NOTICES, SUMMONS AND REMEDIAL ACTION

5.1.1. The cumulative log of complaints, notices and summons is provided in [Appendix 4](#) where there were no complaints, summons nor notices reported since the commencement of the construction work so far.

6. CONCLUSIONS

- 6.1.1. There were no complaints, summons nor notices reported since the commencement of the construction work so far.
- 6.1.2. Several environmental issues have been identified by ET during site inspections in the reporting period, including leak of tarpaulin cover on exposed stockpiles, storage of materials next to existing trees and transplanted trees, oil spill from generator, untidy site area, leak of drip tray for temporary chemical storage, trees maintained and protected not well.
- 6.1.3. The Contractor has implemented mitigation measures to address most of those problems. However during the site inspection, it is identified that there should be improvement on the mitigation measures taken by the Contractor to the issue of transplanted trees maintenance and protection. Follow-up Transplanted Trees Condition Survey has been agreed to be carried out by the Contractor. On-going investigations will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in the following month.
- 6.1.4. The Contractor has been using the waste management and record system including allocation of waste storage areas and the trip ticket system as proposed in the EMP.
- 6.1.5. The ET will continue to implement the environmental monitoring & audit programme in accordance with the EM&A Manual requirements.

APPENDIX 1

SITE LAYOUT PLANS

APPENDIX 2

CONSTRUCTION PROGRAMME

APPENDIX 3

THE CONTACT DETAILS OF KEY PERSONNEL

Contact Details of Key Personnel for the Project

Company / Department	Name	Position	Telephone
URS Hong Kong Ltd.	Mr. Rodney Ip	Environmental Team Leader	2410 3750
URS Hong Kong Ltd.	Mr. Vincent Kwan	Resident Engineer	2672 7938
Sang Hing – Kuly Joint Venture	Mr. Jeff Chan	Project Manager	9606 2398
Sang Hing – Kuly Joint Venture	Mr. W.K. Tang	Site Agent	9300 7037
Sang Hing – Kuly Joint Venture	Mr. Michael Wan	Site Environmental Officer	9222 3089
Fugro Hong Kong Ltd.	Mr. Colin Yung	Independent Environmental Checker	3565 4114

APPENDIX 4 CUMULATIVE LOG OF COMPLAINTS

CUMULATIVE LOG OF COMPLAINTS

Environmental Parameters	No. of Outstanding Complaints	No. of complaints received in this reporting month	Cumulative no. of complaints received since commencement of project
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	0

APPENDIX 5

WEEKLY ENVIRONMENTAL WALK

RECORDS