

## Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Monthly EM&A Report

December 2016

Submitted to

**Prepared By** 

**Environmental Protection Department** 

Meinhardt Infrastructure and Environment Ltd

Meinhardt Infrastructure and Environment Limited

# Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Monthly EM&A Report

(December 2016)

Certified by:	Fredrick Leong	h
Position:	Environmental Team Lead	der

Date: <u>13 January 2017</u>

M MOTT MACDONALD

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Your Reference

Our Reference JFP/EC/ST/pl/T329380/22 .05/L-0151

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T +852 2828 5757 F +852 2827 1823 mottmac.hk Environmental Monitoring and Audit (EM&A) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2 (between Tai Hang to Wo Hop Shek Interchange) – Entrusted Works Environmental Permit No. EP-324/2008/D Condition 3.3 – Submission of Monthly EM&A Report – December 2016 for the portion of Stage 2 works entrusted to Civil Engineering and Development Department (CEDD) under Contract No. CV/2012/09

> 12 January 2017 By Fax (2805 5028) & Hand

We refer to the revised Monthly EM&A Report – December 2016 received on 12 January 2017 submitted by the Environmental Team via email. Pursuant to Environmental Permit Condition 3.3, I hereby verify the Monthly EM&A Report – December 2016 (Rev. 0) for the portion of works under Stage 2 of the captioned Project which is entrusted to CEDD under Contract No. CV/2012/09.

Yours faithfully for MOTT MACDONALD HONG KONG LIMITED

Steven Tang Independent Environmental Checker

c.c. HyD CEDD/BCP AECOM Meinhardt

Mr. Chung Lok Chin Mr. Desmond Lam Mr. Alan Lee Mr. Fredrick Leong By Fax (2714 5198) By Fax (3547 1659) By Fax (3922 9797) By Fax (2559 1613)

Date	Revision	Prepared By	Checked By	Approved By
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## EXECUTIVE SUMMARY

The Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 (hereafter called "the Project") covers part of the construction of the widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling which aimed 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 Project covers construction activities at Yuen Leng along the existing Fanling Highway.

The impact EM&A for the Project includes air quality, noise and water quality monitoring. The EM&A programme commenced on 5 November 2013.

This report documents the findings of EM&A works conducted in December 2016. As informed by the Contractor, the major activities in the reporting month were:

Cable Detection and Trial Trenches;

Demolition of Existing Vehicular Bridge;

Footbridge Construction;

Storm Drains Laying;

Noise Barrier Construction;

Pier / Pier Table Construction;

Pile Cap Works;

Portal Beam Construction;

Retaining Wall Construction;

Road Works;

Sewer Works;

Utilities Duct Laying;

Viaduct Segment Erection;

Water Main Laying;

Extended Podium Construction; and

Construction of Remaining Base Slab of Box Culvert ID4.

Breach of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.

No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.



#### Breach of Action and Limit Levels for Noise

No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.

#### Breach of Action and Limit Levels for Water Quality

No exceedance of Limit Level was recorded at the monitoring location I5 in the reporting month. One (1) exceedance of Action Level of Dissolved Oxygen was recorded at the monitoring location I5 on 12 December 2016 in the reporting month. Investigation for the exceedance was conducted which concluded that the exceedance was not related to the project works. The investigation report is presented in **Appendix M**.

#### Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons and successful prosecution was received in the reporting month.

#### Future Key Issues

The major construction works in the coming reporting month are anticipated to include:

Boundary Wall for Pumping Station;

Cable Detection and Trial Trenches;

Construction of Remaining Slab of Box Culvert ID05;

Demolition of Valve Control House;

Footbridge Construction;

Gabion Wall construction;

Re-provisioning of Kiu Tau Footbridge;

Storm Drains Laying;

Noise Barrier Construction;

Pier / Pier Table Construction;

Pile Cap Works;

Portal Beam Construction;

Retaining Wall Construction;

Road Works;

Sewer Works;

Slope Reinstatement Works near Bridge E;



Utilities Duct Laying;

Viaduct Segment Erection;

Water Main Laying; and

Demolition of Existing WSD Telemetry House.

Potential environmental impacts arising from the above construction activities are anticipated to be mainly associated with construction dust, noise, water quality and waste management.



## 1 INTRODUCTION

1.1.1 Chun Wo Construction & Engineering Co Ltd (Chun Wo) was commissioned by the Civil Engineering and Development Department (CEDD) as the Civil Contractor for the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2. Meinhardt Infrastructure & Environment Ltd (MIEL) has been appointed by Chun Wo as the Environmental Team (ET) to fulfill the corresponding EM&A requirements pursuant to Environmental Permit No. EP-324/2008/D in accordance with the Updated EM&A Manual (dated October 2013) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2. The EM&A programme commenced on 5 November 2013.

#### **1.2** Purpose of the Report

1.2.1 This is the monthly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting month of December 2016.

#### 1.3 Report Structure

1.3.1 This monthly EM&A Report comprises the following sections:

Section 1: Introduction

Section 2: Project Information

Section 3: Status of Environmental Licenses, Notifications and Permits

Section 4: Air Quality Monitoring

Section 5: Noise Monitoring

Section 6: Water Monitoring

- Section 7: Waste Management
- Section 8: Environmental Site Inspection and Audit
- Section 9: Implementation Status of Environmental Mitigation Measures

Section 10: Summary of EP Submission in the Reporting Month

Section 11: Environmental Non-Conformance

Section 12: Future Key Issues

Section 13: Conclusions and Recommendations



## 2 **PROJECT INFORMATION**

#### 2.1 Background

- 2.1.1 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 1, which links Hong Kong Island to Shenzhen. At present, this section of Route 1 is a dual 3-lane carriageway. However, at several major interchanges along this section of Route 1, the highway is only dual-2 lane. Severe congestion is a frequent occurrence during peak periods, particularly in the Kowloon bound direction.
- 2.1.2 The objective of the 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.
- 2.1.3 The construction works for the Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling are to be delivered in 2 stages:

Stage 1 – Construction works between Island House Interchange and Tai Hang; and

Stage 2 – Construction works between Tai Hang and Wo Hop Shek Interchange.

- 2.1.4 The construction works of Stage 1 under the EP commenced in November 2009 and was planned to be completed in December 2013 tentatively. The works of Stage 2 was planned to commence in November 2013 and complete by end of 2016. Hyder-Arup-Black and Veatch Joint Venture (HABVJV) was appointed by the Highways Department (HyD) as the consultants for the design and construction assignment for the Project. Mott MacDonald Hong Kong Ltd is the Independent Environmental Checker (IEC) of both Stage 1 and Stage 2 works.
- 2.1.5 A portion of Stage 2 works of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (hereafter called "the Project") is entrusted to the contractor of Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works Contract 3, i.e. Chun Wo. AECOM Asia Co Ltd was appointed by the CEDD as the consultant for the design and construction assignment for the Liantang development.
- 2.1.6 The Project is a Designated Project under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). An Environmental Impact Assessment (EIA) Report together with an Environmental Monitoring and Audit (EM&A) Manual were approved on 14 July 2000 (Register Number: EIA-043/2000). The Project is governed by an Environmental Permit (EP) (EP-324/2008) which was granted on 23 December 2008. A variation of EP (VEP) was applied and the VEP (EP-324/2008/A) was subsequently granted on 31 January 2012. An additional VEP has been applied on 24 February 2014 and the VEP (EP-324/2008/B) was subsequently granted on 17 March 2014. Furthermore, an additional VEP has been applied on 9 March 2015 and the VEP (EP-324/2008/C) was subsequently granted on 27 March 2015. The current VEP (EP-324/2008/D) was granted on 27 August 2015.



#### 2.2 Site Description

2.2.1 The major construction activities under the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 include:

At-Grade Road Works – Temporary and permanent road formation, pipe laying, road drainage, footpath and noise barrier construction;

Demolition of existing Kiu Tau Footbridge and Footbridge Reprovision; and

Box Culvert Extension – Flow diversion of existing stream, excavation, sub-base and blinding, base, wall and top slab construction.

2.2.2 **Figure 1** shows the works areas for the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2.

#### 2.3 Construction Programme and Activities

2.3.1 The major construction activities undertaken in the reporting month are summarized below:

Cable Detection and Trial Trenches;

Demolition of Existing Vehicular Bridge;

Footbridge Construction;

Storm Drains Laying;

Noise Barrier Construction;

Pier / Pier Table Construction;

Pile Cap Works;

Portal Beam Construction;

Retaining Wall Construction;

Road Works;

Sewer Works;

Utilities Duct Laying;

Viaduct Segment Erection;

Water Main Laying;

Extended Podium Construction; and

Construction of Remaining Base Slab of Box Culvert ID4.



#### 2.3.2 The construction programme is presented in **Appendix A**.

#### 2.4 **Project Organisation**

2.4.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarised in **Table 2.1**.

Party	Role	Position	Name	Telephone	Fax	
AECOM	Engineer's	Senior Resident Engineer	Mr. Alan Lee	2171 3303	2171 3498	
AECOM	Representative	Resident Engineer (Environmental)	Mr. Perry Yam	2171 3350	2171 3490	
Mott MacDonald	Independent Environmental Checker (IEC)	IEC	Mr. Steven Tang	2828 5920	2827 1823	
	O a star star	Site Agent	Mr. Daniel Ho	2638 6144	0000 7077	
Chun Wo	Contractor	Environmental Officer	Mr. Victor Huang	2638 6181	2638 7077	
Meinhardt	Environmental Team (ET)	ET Leader	Mr. Fredrick Leong	2859 1739	2540 1580	

 Table 2.1
 Contact Information of Key Personnel

# 3 STATUS OF ENVIRONMENTAL LICENSES, NOTIFICATION AND PERMITS

3.1.1 The relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in **Table 3.1**.

Permit / License No.	Valid Period		Otatus	<b>_</b>
/ Notification / Reference No.	From	То	Status	Remarks
Environmental Permi	t		1	
EP-324/2008/D	27 Aug 2015		Granted on 27 Aug 2015	
<b>Construction Noise P</b>	ermit			
GW-RN0414-16	18 Jun 2016	17 Dec 2016	Valid	For road diversion and maintenance of Fanling Highway Southbound
GW-RN0434-16	22 Jun 2016	21 Dec 2016	Valid	For general works at the southward of site office
GW-RN0549-16	30 Jul 2016	9 Jan 2017	Valid	For road resurfacing of Fanling Highway Southbound
GW-RN0561-16	16 Aug 2016	11 Feb 2017	Valid	For road diversion and maintenance of Fanling Highway Northbound
GW-RN0581-16	25 Aug 2016	24 Feb 2017	Valid	For segment Delivery to Kiu Tau
GW-RN0580-16	25 Aug 2016	24 Feb 2017	Valid	For general works at the northward of site office
GW-RN0596-16	17 Aug 2016	15 Feb 2017	Valid	For fuel delivery entering the construction site next to MTRC's East Rail Line at Tong Hang Tung
GW-RN0619-16	22 Aug 2016	14 Feb 2017	Valid	For tractor with trailer entering the Construction Site next to MTRC's East Rail Line at Tong Hang Tung

#### Table 3.1 Status of Environmental Licenses, Notifications and Permits



Permit / License No.	Valid I	Period	Otatura	Domorius
/ Notification / Reference No.	From	То	Status	Remarks
GW-RN0646-16	10 Sep 2016	9 Mar 2017	Valid	For segment erection of pier AA4, AB6, AD7 and AA18
GW-RN0649-16	3 Sep 2016	7 Jan 2017	Valid	For traffic road works at a section of Fanling Highway both bounds
GW-RN0653-16	11 Sep 2016	10 Mar 2017	Valid	For segment erection AB7 to AB10
GW-RN0654-16	15 Sep 2016	14 Mar 2017	Valid	For segment erection crossing over MTRC's Rail Track of Pier AB11 and AD12 (1900-2300)
GW-RN0708-16	8 Oct 2016	26 Jan 2017	Valid	For demolition of vehicular bridge at Fanling Highway both bounds
GW-RN0711-16	1 Oct 2016	13 Jan 2017	Valid	For installation of temporary support system of existing vehicular flyover linking at Fanling Highway both bounds
GW-RN0720-16	4 Oct 2016	31 Mar 2017	Valid	For segment erection of spans AA5, AA6, AA7, AB3 and AB4 across Fanling Highway
GW-RN0729-16	5 Oct 2016	31 Mar 2017	Valid	For segment erection of spans AA11, AA12, AC3 and AC4 across Fanling Highway
GW-RN0795-16	5 Nov 2016	29 Apr 2017	Valid	For falsework modification of pier AD12
GW-RN0816-16	13 Nov 2016	27 Mar 2017	Valid	For lane shifting work at Fanling Highway Northbound For segment
GW-RN0833-16	13 Nov 2016	10 May 2017	Valid	erection crossing over MTRC's Rail Track of Pier AB11 and AD12 (0115-0500)



Permit / License No.	Valid	Period	<b>0</b>	<b>_</b>
/ Notification / Reference No.	From	То	Status	Remarks
GW-RN0843-16	18 Nov 2016	17 May 2017	Valid	For segment erection of Pier AB11
GW-RN0836-16	15 Nov 2016	31 Mar 2017	Valid	For segment erection at AC1 end span
GW-RN0856-16	17 Nov 2016	7 Jan 2017	Valid	For loading and unloading along Fanling Highway both bounds For segment
GW-RN0871-16	29 Nov 2016	20 May 2017	Valid	stitches concreting between AA11 and AA12 crossing over Fanling Highway
GW-RN0872-16	29 Nov 2016	20 May 2017	Valid	For segment stitches concreting from AB3 to AB5 crossing over Fanling Highway
GW-RN0870-16	30 Nov 2016	13 May 2017	Valid	Road marking works in Fanling Highway bothbounds
GW-RN0901-16	11 Dec 2016	4 Jun 2017	Valid	Demolition of Vehicular Bridge at Fanling Highway Southbound in Sunday and Public Holidays
GW-RN0939-16	22 Dec 2016	21 Jun 2017	Valid	For general works at southward of site office
GW-RN0947-16	24 Dec 2016	15 Jun 2017	Valid	For road diversion and maintenance of Fanling Highway Southbound
GW-RN0965-16	28 Dec 2016	13 Jan 2017	Valid	Demolition of Vehicular Bridge at Fanling Highway South Bound at Night during Weekdays
Wastewater Discharge	e License			
WT00016832-2013	28 Aug 2013	31 Aug 2018	Valid	
Chemical Waste Prod		on		
5113-634-C3817-01	7 Oct 2013		Valid	



Permit / License No.	Valid Period		Chatture	Domorko	
/ Notification / Reference No.	From	То	Status	Remarks	
Billing Account for Co	Billing Account for Construction Waste Disposal				
7017914	2 Aug 2013		Account Active		
Notification Under Air Pollution Control (Construction Dust) Regulation					
	31 Jul 2013	30 Jul 2019	Notified		



## 4 AIR QUALITY MONITORING

#### 4.1 Monitoring Requirement

4.1.1 In accordance with the Updated EM&A Manual, 1-hr and 24-hr total suspended particulate (TSP) levels at the designated air quality monitoring station are required. Impact 24-hour TSP monitoring should be carried out for at least once every 6 days. For the 1-hr TSP impact monitoring, the sampling frequency of at least three times in every 6 days should be undertaken when the highest dust impact occurs.

#### 4.2 Monitoring Equipment

4.2.1 The 1hr- TSP and 24-hr TSP air quality monitoring were performed using a High Volume Sampler (HVS), of which its location and operation satisfy, as far as practicable, all the requirements as specified in the Updated EM&A Manual. The brand and model of the equipment are given in **Table 4.1**.

 Table 4.1
 Air Quality Monitoring Equipment

Equipment	Brand and Model	Quantity	Serial Number
High Volume	Tisch Total Suspended Particulate		
Sampler	Mass Flow Controlled High Volume	1	2359
(1-hr TSP and	Air Sampler (Model No. TE-5170	I	2009
24-hr TSP)	MFC)		

- 4.2.2 The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- 4.2.3 Calibration of the HVS (five point calibration) using Calibration Kit was carried out every two months. The HVS calibration orifice will be calibrated annually. Calibration certificate of the TE-5025A Calibration Kit and the HVS are provided in **Appendix C**.

#### 4.3 Monitoring Location

4.3.1 Air quality monitoring was conducted at the location specified in the Updated EM&A Manual. **Table 4.2** describes the details of the air quality monitoring station with its location as shown in **Figure 2**.

 Table 4.2
 Location of Air Quality Monitoring

Air Monitoring Station ID	Monitoring Location	Description
AM1(SR77) *	Yuen Leng 2 *	Residential, Ground floor

Remark:

Location and Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

#### 4.4 Monitoring Parameters, Frequency and Duration

4.4.1 **Table 4.3** summarizes the monitoring parameters, frequency and duration of impact TSP monitoring.



Parameter	Frequency and Duration
1-hour TSP	At least three times in every 6 days should be undertaken when the highest dust impact occur
24-hour TSP	Once every 6 days

#### 4.5 Monitoring Methodology

1-hr and 24-hr TSP Monitoring

- 4.5.1 With the consideration of criteria stated in the Updated EM&A Manual, the HVS was installed in the vicinity of the air sensitive receivers.
- 4.5.2 The relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any special phenomena observed were recorded. The weather information was referenced from Hong Kong Observatory (http://www.weather.gov.hk/wxinfo/pastwx/extractc.htm).
- 4.5.3 A HOKLAS accredited laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments, to handle the 24-hr TSP samples, was employed for sample analysis.
- 4.5.4 Filter papers of size 8"x10" were labelled before sampling. They were inspected to be clean with no pin holes and conditioned in a humidity controlled chamber for over 24-hr and were pre-weighed before use for the sampling.
- 4.5.5 The 24-hr TSP levels were measured by following the standard high volume sampling method for TSP as set out in the Title 40 of the United States Code of Federal Regulations, Chapter 1 (Part 50), Appendix B. TSP was sampled by drawing air through a conditioned, pre-weighted filter paper inside the HVS at a controlled air flow rate. After 24-hr sampling, the filter papers loaded with dust were kept in a clean and tightly sealed plastic bag, and then returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with a readout down to 0.1 mg.
- 4.5.6 All the collected samples were kept in a good condition for 6 months before disposal.
- 4.5.7 For 1-hr TSP monitoring, monitoring methodology is the same as 24-hr TSP monitoring which has been presented in **Section 4.5.1** to **Section 4.5.6**, but with sampling period changed to 1 hour.

#### 4.6 Monitoring Schedule for the Reporting month

4.6.1 The schedule for environmental monitoring for the reporting month is provided in **Appendix D**. Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix E**.

#### 4.7 Monitoring Results

4.7.1 The monitoring results for 1-hr and 24-hr TSP are summarised in **Table 4.4** and **Table 4.5** respectively. Detailed air quality monitoring results and the graphical presentation



of air quality monitoring data for the current and past three reporting months are presented in **Appendix F**.

Table 4.4 Summary of 1-hr TSP Monitoring Results

ASR ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
AM1(SR77) *	151.6	137.3 –166.2	292.7	500

Remark:

Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

Table 4.5 Summary of 24-hr TSP Monitoring Results

ASR ID	Average (μg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
AM1(SR77) *	106.8	55.4 – 140.3	170.3	260

Remark:

Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

- 4.7.2 No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 4.7.3 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 4.7.4 The Event and Action Plan for the occurrence of non-compliance of the air quality criteria is annexed in **Appendix G**.



## 5 NOISE MONITORING

#### 5.1 Monitoring Requirements

5.1.1 In accordance with the Updated EM&A Manual, the impact noise monitoring frequency shall depend on the scale of the construction activities. An initial guide on the regular monitoring frequency should be at least once per week when noise generating activities are underway.

#### 5.2 Monitoring Equipment

5.2.1 Noise monitoring was performed using a sound level meter at the monitoring station. The sound level meter deployed complies with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. An acoustic calibrator was deployed to check the sound level meter at a known sound pressure level. The brand and model of the equipment is given in **Table 5.1**.

 Table 5.1
 Noise Monitoring Equipment

Equipment	Brand and Model	Quantity	Serial Number
Sound Level Calibrator	Rion (Model No. NC-74)	1	34857296
Sound Level Meter	B&K (Model No. 2238)	1	2694908

5.2.2 The sound level calibrator and sound level meter were verified by a certified laboratory every year. Calibration certificates of the sound level meter and acoustic calibrator are provided in **Appendix C**.

#### 5.3 Monitoring Locations

5.3.1 Impact noise monitoring was conducted at the location specified in the Updated EM&A Manual. **Table 5.2** describes the details of the noise monitoring station with its location as shown in **Figure 2**.

NSR ID	Monitoring Location	Description
M1(SR77) *	Yuen Leng 2 *	Residential, Ground floor

Remark:

Location and Station / NSR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

#### 5.4 Monitoring Parameters, Frequency and Duration

5.4.1 **Table 5.3** summarizes the monitoring parameters, frequency and duration of impact noise monitoring.



#### Table 5.3 Noise Monitoring Parameters, Frequency and Duration

Parameter and Duration	Frequency
30-mins measurement at between 07 weekdays. Leq, L10 and L90 would b	

#### 5.5 Monitoring Methodology

#### 5.5.1 The monitoring procedures are summarised as follows:

The sound level meter was set on a tripod at a height of 1.2 m above the ground for free-field measurements at monitoring station SR77;

The battery condition was checked to ensure good functioning of the meter;

Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

Frequency weighting: A

Time weighting: Fast

Parameters: Leq, L10 and L90

Time measurement: Leq(30-minutes) during non-restricted hours i.e. 07:00 – 19:00 hrs on normal weekdays

Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.

At the end of the monitoring period, the Leq, L10 and L90 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.

A façade correction of +3dB (A) shall be made to the noise parameter obtained by free field measurement.

#### 5.6 Monitoring Schedule for the Reporting Month

5.6.1 The schedule for environmental monitoring for the reporting month is provided in **Appendix D**. Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix E**.

#### 5.7 Monitoring Results

5.7.1 The monitoring results for noise are summarized in **Table 5.4** and the monitoring results and the graphical presentation of noise level for the current and past three reporting months are presented in **Appendix H**.



Table 5.4	Summary of Noise	<b>Monitoring Results</b>
-----------	------------------	---------------------------

Noise Monitoring Station ID	Average, dB(A), Leq (30min) <sup>(2)</sup>	Range, dB(A), Leq (30min) <sup>(2)</sup>	Action Level	Limit Level, dB(A)
M1(SR77) <sup>(1)</sup>	65.8	63.0 – 68.0	When one documented valid complaint is received	75

Remark:

(1) Station / NSR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

(2) +3dB(A) façade correction included

- 5.7.2 Major noise sources during the noise monitoring included construction activities of the Project and that along Tai Wo Service Road East, and nearby traffic noise.
- 5.7.3 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 5.7.4 The Event and Action Plan for the occurrence of non-compliance of the noise criteria is annexed in **Appendix G**.



## **6 WATER MONITORING**

#### 6.1 Introduction

- 6.1.1 The box culvert works have been partially completed by the end of March 2014 except the last construction activity, installation of a base slab at Box Culvert ID4. Due to the loading requirement of a fresh water main under the box culvert, installation of the base slab at Box Culvert ID4 has commenced in December 2016.
- 6.1.2 The 4-week post construction water quality monitoring will be commenced after the installation of the base slab finishes, hence the completion of the box culvert works.
- 6.1.3 Impact monitoring for water quality were carried out twelve (12) times in the reporting month. The water quality monitoring was taken on 2, 5, 7, 9, 12, 14, 16, 19, 21, 23, 28 and 30 December 2016.

#### 6.2 Monitoring Requirements

6.2.1 In accordance with the Updated EM&A Manual, during the course of the culvert extension works, monitoring shall be undertaken on three occasions per week. The interval between two sets of monitoring shall not be less than 36 hours except where there are exceedances of Action and/or Limit levels. The results are included in **Appendix I** and **Appendix J**.

#### 6.3 Monitoring Equipment

6.3.1 The equipment used in the water quality monitoring programme is summarised in **Table 6.1**.

Equipment	Model and Make
Turbidity meter	HACH Model 2100Q is (Serial No. 13120C029845)
Multifunctional Meter (Scope of Test: Conductivity, Dissolved Oxygen, pH, Salinity and Temperature)	Professional Plus (Serial No. 10D101566)

#### Table 6.1 Water Quality Monitoring Equipment

6.3.2 The monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS before use and subsequently re-calibrated at 3-monthly intervals throughout all stages of the water quality monitoring. Copies of the calibration certificates for the water quality monitoring equipment are attached in **Appendix C**.

#### 6.4 Monitoring Parameters, Frequency and Duration

6.4.1 Measurements for each monitoring station were conducted 3 days per week for the reporting month. **Table 6.2** summarises the monitoring parameters, frequency and duration of the baseline water quality monitoring.

 Table 6.2
 Water Quality Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter, unit	Frequency
Control Stations: C3a and C3b Impact Station: I5	<ul> <li>Depth, m</li> <li>Temperature, °C</li> <li>Salinity, ppt</li> </ul>	3 days per week



Monitoring Stations	Parameter, unit	Frequency
	- pH - DO, mg/L - DO Saturation, % - Turbidity, NTU - SS, mg/L	

#### 6.5 Monitoring Locations

6.5.1 According to the Updated EM&A Manual, measurements were taken at all impact and control stations as summarised in **Table 6.3**. The locations of the monitoring stations are shown in **Figure 3**.

Table 6.3	Locations of Water Quality Monitoring
-----------	---------------------------------------

Station	Description	Easting	Northing
15	Downstream of Ma Wat River (Yuen Leng)	833931	837859
C3a	Upstream of Ma Wat River (Nam Wa Po)	833816	837644
C3b	Upstream of Ma Wat River (Yuen Leng)	833931	837736

#### 6.6 Monitoring Methodology

#### Instrumentation

6.6.1 The parameters of in-situ measurements included water depth, dissolved oxygen (DO), dissolved oxygen saturation (DOS), turbidity level, pH value and water temperature.

**Operating/Analytical Procedures** 

- 6.6.2 Since water depths for all monitoring stations were less than 1m throughout the whole baseline measurement period, only mid-depth level was monitored.
- 6.6.3 At each monitoring station, at least duplicate readings of dissolved oxygen content and turbidity were taken. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement.
- 6.6.4 Water samples were collected by the water sampler and filled into polyethylene bottles for laboratory determination of suspended solids. Sampling bottles were pre-rinsed with the same water samples, and filled up to the rim, capped tightly and labeled immediately. The sample bottles were then packed into a cool-box kept at 4°C, and delivered to a HOKLAS accredited laboratory, Enviro Labs Ltd. (HOKLAS no.: 128) for analysis. The results for laboratory analysis of suspended solids are presented in **Appendix I**.

#### 6.7 Monitoring Schedule for the Reporting Month

6.7.1 The schedule for environmental monitoring for the reporting month is provided in **Appendix D**. Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix E**.



#### 6.8 Monitoring Results

6.8.1 The water quality criteria, namely Action and Limit Levels, as specified in the Updated EM&A Manual are shown in **Table 6.4**.

Parameters	Action	Limit
DO in mg/L	6.7 mg/L	4 mg/L or 40% saturation at 15 degree Celsius
SS in mg/L	42.6 mg/L or 120% of upstream control station's SS of the same day	46.8 mg/L or 130% of upstream station's SS of the same day and specific sensitive receiver water quality requirements
Turbidity (Tby) in NTU	81.9NTU or 120% of upstream control station's Tby of the same day	91.9NTU or 130% of upstream control station's Tby of the same day

 Table 6.4
 Action and Limit Levels for Water Quality Monitoring

Notes:

For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits. For SS and Tby, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

- 6.8.2 The detailed water quality monitoring results and the graphical presentation of water quality monitoring data for the current and past three reporting months are presented in **Appendix J**.
- 6.8.3 The possible influences in monitoring results were suspected to be natural variation.
- 6.8.4 No exceedance of Limit Level was recorded in the reporting month. One (1) exceedance of Action Level on Dissolved Oxygen was recorded at the monitoring location I5 on 12 December 2016. Investigation for the exceedance was conducted which concluded that the exceedance were not related to the project works. The investigation reports are presented in **Appendix M**.
- 6.8.5 The Event and Action Plan for the occurrence of non-compliance of the water quality criteria is annexed in **Appendix G**.



## 7 WASTE MANAGEMENT

- 7.1.1 The Contractor has registered as a chemical waste producer of the Project. The C&D materials and waste sorting were carried out on-site. Receptacles were provided for general refuse collection.
- 7.1.2 As advised by the Contractor, a total of 675m<sup>3</sup> of excavated material has been generated. 425m<sup>3</sup> of inert C&D materials was disposed of at public fill to Tuen Mun Area 38. 120m<sup>3</sup> inert C&D materials were reused on site. 120m<sup>3</sup> of general refuse was disposed of at North East New Territories (NENT) Landfill. No plastics was collected by recycling contractor in the reporting month. No paper/cardboard packaging was collected by recycling contractor in the reporting month. 1m<sup>3</sup> of metals was collected by recycling contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. Details of the waste management data are presented in **Appendix K**.



## 8 ENVIRONMENTAL SITE INSPECTION AND AUDIT

#### 8.1 Site Inspection

- 8.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the site inspection is provided in **Appendix L**.
- 8.1.2 In the reporting month, 4 site inspections were carried out on 5, 12, 21 and 29 December 2016. The one held on 29 December 2016 was a joint inspection with the IEC, ER, ET and Contractor. No site inspection was conducted by the EPD during the reporting month. No non-compliance was recorded during the site inspection. A summary of the reminders and observations recorded during the site inspections are presented in **Table 8.1**.

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	N/A	N/A	N/A
Air Quality	05 Dec 2016	Remind the Contractor to cover the stockpiling area when not in use properly.	Only areas with works in progress are uncovered during the 12 December 2016 site inspection, and remind Contractor to cover the stockpile after work daily.
Noise	N/A	N/A	N/A
Waste / Chemical Managem- ent	N/A	N/A	N/A
Landscape & Visual	N/A	N/A	N/A
Permits / Licenses	N/A	N/A	N/A

#### Table 8.1 Observations and Recommendations of Site Audit



### 9 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

9.1.1 The Contractor has implemented the relevant environmental mitigation measures as specified in the EIA Reports, EPs and updated EM&A Manual. The implementation status of environmental mitigation measures during the reporting period is summarized in **Appendix L**.



### 10 SUMMARY OF EP SUBMISSION IN THE REPORTING MONTH

10.1.1 The status of the required submission under the EP during the reporting period is summarized in **Table 10.1**.

Table 10.1 Status of Required Submission under Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.3	Monthly EM&A Report for November 2016	14 December 2016

- 10.1.2 The Quarterly EM&A Report (August 2016 to October 2016) was prepared and submitted on 9 December 2016 in accordance to Section 8.3.4 of the EM&A Manual.
- 10.1.3 The Annual EM&A Review Report (November 2015 to October 2016) was prepared and submitted on 9 December 2016 in accordance to Section 8.3.4 of the EM&A Manual.



## 11 ENVIRONMENTAL NON-CONFORMANCE

#### **11.1** Summary of Monitoring Exceedances

- 11.1.1 No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 11.1.2 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 11.1.3 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 11.1.4 No exceedance of Limit Level was recorded for water quality monitoring at the monitoring location I5 in the reporting month. One (1) exceedance of Action Level of Dissolved Oxygen was recorded for water quality monitoring at the monitoring location I5 on 12 December 2016 in the reporting month.

#### **11.2** Summary of Environmental Non-Compliance

11.2.1 No environmental non-compliance was recorded in the reporting month. The cumulative statistics are provided in **Appendix N**.

#### **11.3** Summary of Environmental Complaints

11.3.1 No environmental complaints were received in the reporting month. The cumulative statistics are provided in **Appendix N**.

#### 11.4 Summary of Environmental Summon and Successful Prosecutions

11.4.1 No environmental related prosecution or notification of summons was received in the reporting month. The cumulative statistics are provided in **Appendix N**.



## 12 FUTURE KEY ISSUES

#### 12.1 Construction Programme for the Next Month

12.1.1 The major construction works in the coming reporting month are anticipated to include:

Boundary Wall for Pumping Station;

Cable Detection and Trial Trenches;

Construction of Remaining Slab of Box Culvert ID05;

Demolition of Valve Control House;

Footbridge Construction;

Gabion Wall construction;

Re-provisioning of Kiu Tau Footbridge;

Storm Drains Laying;

Noise Barrier Construction;

Pier / Pier Table Construction;

Pile Cap Works;

Portal Beam Construction;

Retaining Wall Construction;

Road Works;

Sewer Works;

Slope Reinstatement Works near Bridge E;

Utilities Duct Laying;

Viaduct Segment Erection;

Water Main Laying; and

Demolition of Existing WSD Telemetry House.

#### 12.2 Key Issues for the Coming Month

12.2.1 Key issues to be considered in the coming month are anticipated to include:Site discharges should be properly collected and treated prior to discharge;Properly maintain all drainage facilities and wheel washing facilities on site;



Expose slopes and dusty stockpile should be covered up properly if no work will be conducted;

Operation of construction plant should be sequenced where practicable;

Good housekeeping should be maintained and general refuse should be removed regularly;

Chemical waste should be stored, handled and disposed of properly;

Properly store and label oils and chemicals on site; and

A spill response procedure shall be in place and absorption material available for minor spillages.

#### 12.3 Monitoring Schedule for the Next Month

12.3.1 The tentative schedule for environmental monitoring for the coming month is provided in **Appendix D**.



## 13 CONCLUSIONS AND RECOMMENDATIONS

#### 13.1 Conclusions

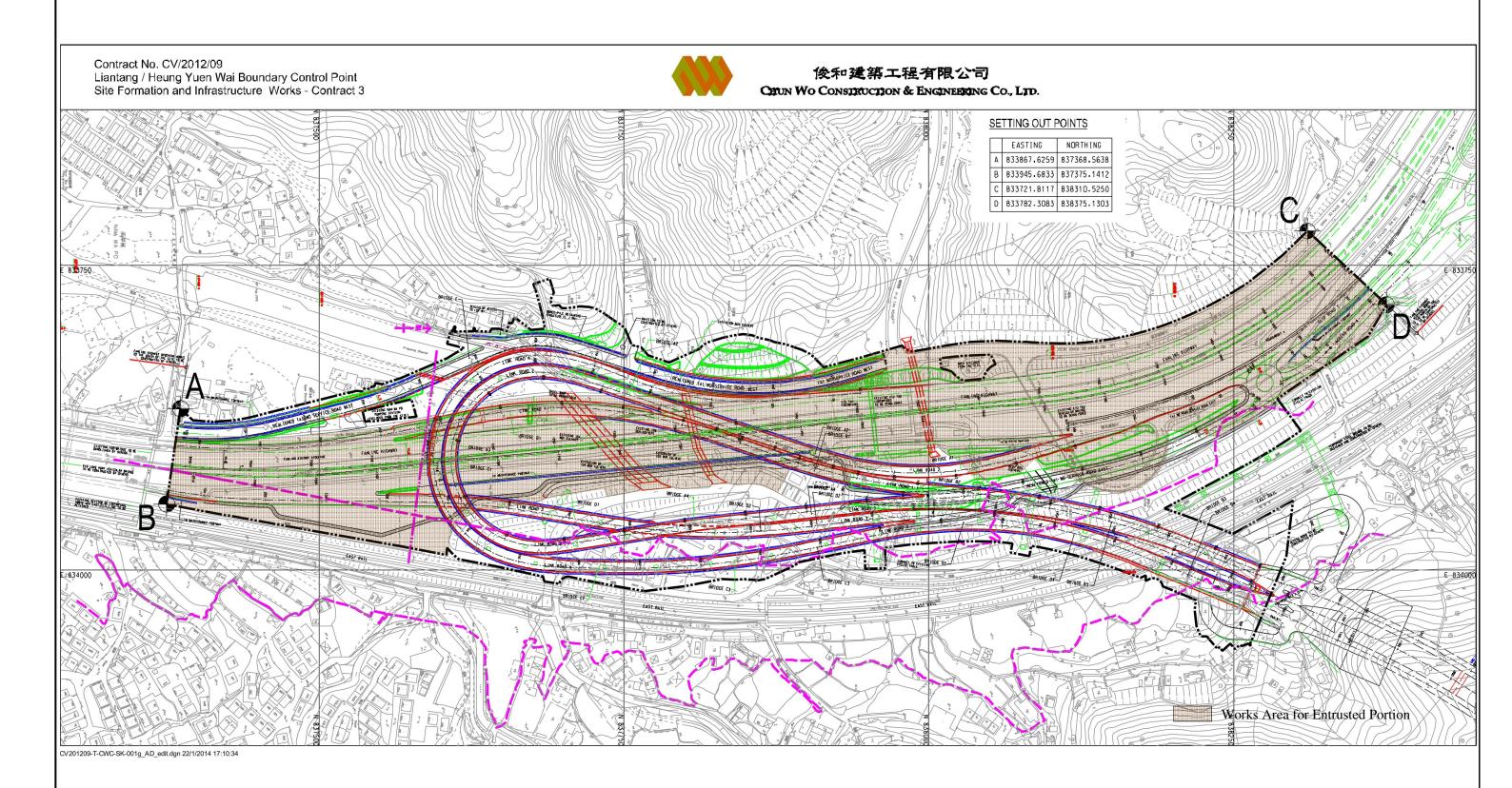
- 13.1.1 The construction phase EM&A programme of the Project commenced on 5 November 2013.
- 13.1.2 The 1-hr TSP, 24-hr TSP, noise and water quality monitoring were carried out in the reporting period.
- 13.1.3 No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 13.1.4 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 13.1.5 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 13.1.6 One (1) exceedance of Action Level on Dissolved Oxygen and no exceedance of Limit Level were recorded for water quality monitoring at the monitoring location I5 in the reporting month.
- 13.1.7 Four (4) environmental site inspections were carried out in the reporting month. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site audit.

#### 13.2 Recommendations

13.2.1 According to the environmental site inspections performed in the reporting month, there was no recommendation.



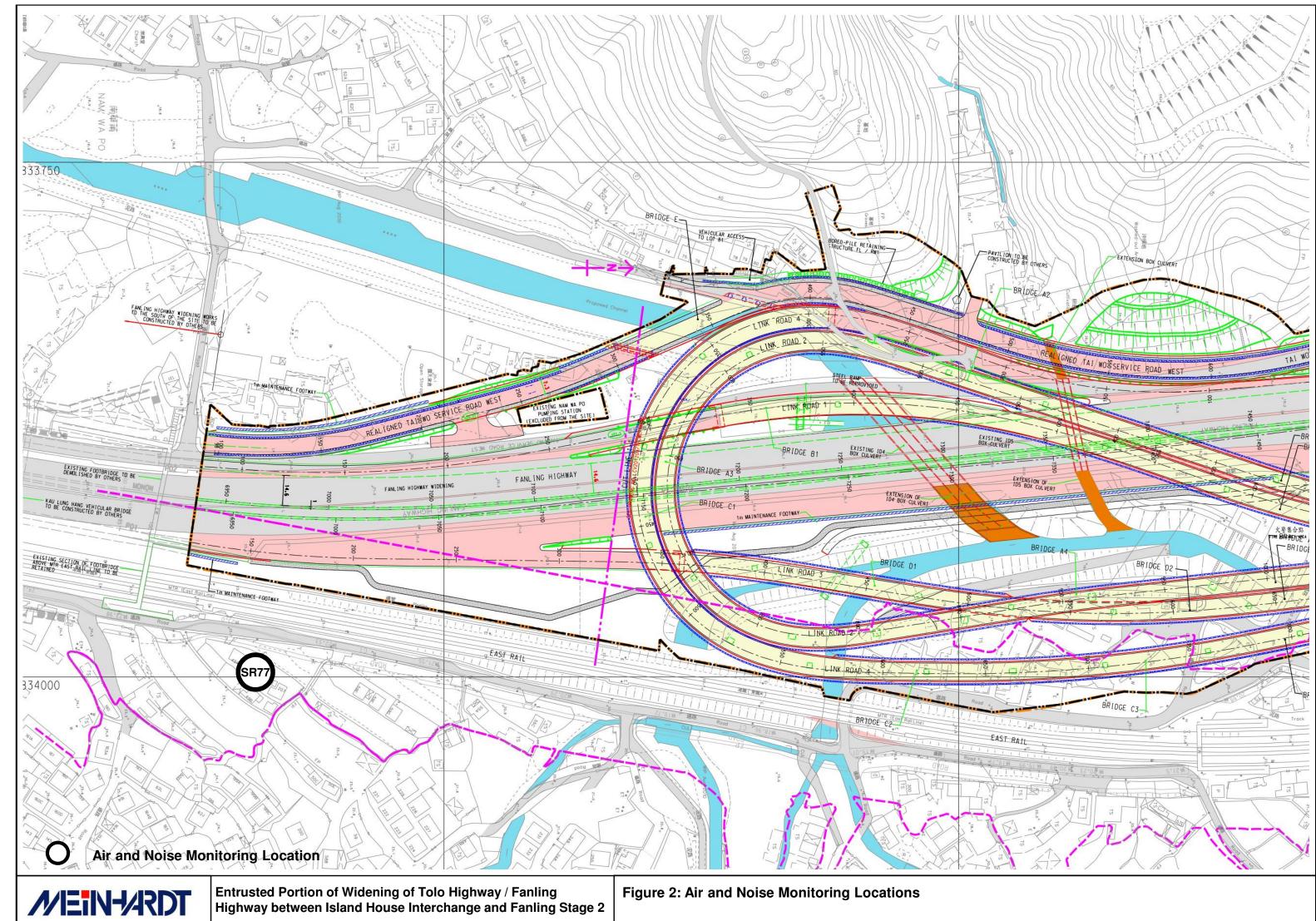
## Figure





Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Figure 1: Demarcation of Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling – Stage 2





# Appendix A Construction Programme

ivity ID	Activity Name	OD	RD	Start	Finish	TF	2016			2017	1	
2 Manth Dalling							Dec	Jan		Feb	Mar	Apr
	g Programme 2016-12-21											
Key Dates (Cor	ntractual)											
KD-1300	KD10: Stage S4 - Completion of road widening of Fanling Highway within SBZ2 and allow access for HY/2012/06 $$	0	0		21-Dec-16*	-19		<ul> <li>KD10: Stage S4 - Completion of road v</li> </ul>	videnihg of Fanlin	g Highway within SI	BZ2 and allow access for HY/2012	2/06
Dependent Mile	stones from Other Contracts											
MS-DM04	Completion of NB70 by FHW3	0	0		21-Dec-16*	-16		<ul> <li>Completion of NB70 by FHW3</li> </ul>				
Related to North	h Buffer Zone											
MS-NBZ020	Shift existing FLHN NB 3 lanes eastward [TTA no.R-4]	0	0	21-Dec-16*		-52		Shift existing FLHN NB 3 lanes eastware	d [TTA no.R-4]			
Related to Sout	h Buffer Zone											
MS-SBZ110	Shift existing FLHS SB Slow Lane to future FLH 1st Lane by FHW3 Contractor (TTA stage \$10)	0	0	21-Dec-16*		-23		Shift existing FLHS SB Slow Lane to fu	ure FLH 1st Lane	e by FHW3 Contrac	tor (TTA stage S10)	
MS-SBZ120	Shift existing FLHS SB Middle Lane to future FLH 2nd Lane by FHW3 Contractor (TTA stage S11)	0	0	22-Jan-17*		0		♦ Sh	ft existing FLHS \$	SB Middle Lane to fu	ture FLH 2nd Lane by FHW3 Co	ontractor (T
MS-SBZ210	Shift existing TWSRW NB to permanent alignment by FHW3 Contractor (TTA stage \$10)	0	0	31-Jan-17*		0			Shift existi	ng TWSRW NB to p	ermanent alignment by FHW3 C	ontractor (T
Major Milestone												
MS-1050	T5: TTA to shift partial FLHN NB eastward to existing SB connecting FHW3's TTA Scheme [TTA no.R-4]	1	1	21-Dec-16*	21-Dec-16	-52		T5: TTA to shift partial FLHN NB eastw	ard to existing SE	connectin g FHW3	\$ TTA Scheme [TTA no.R-4]	
MS-0120	Completion of 2 nos. of piers crash with existing FLH (by 1 set)	0	0		14-Jan-17	46		<ul> <li>Completion</li> </ul>	of 2 nos. of piers	crash with existing I	LH (by 1 set)	
MS-1070A	T7a: TTA to shift FLH SB 3 Lanes to the Permanent Alignment & FLHS SB 2nd lane [TTA no.R-5]	1	1	28-Jan-17	28-Jan-17*	0			T7a: TTA to s	hift FLH SB 3 Lanes	to the Permanent Alignment & F	LHS SB 2n
MS-1080a	T8a: TTA to shift FLH NB Fast Lane to the Permanent Alignment (4th lane) & FLHS SB 3rd Lane (South Portion)[TTA no.R-6]	1	1	12-Mar-17	12-Mar-17	0					T8a: TTA to shift F	LHNB Fa
MS-1080b	T8b: TTA to shift FLH NB Fast Lane to the Permanent Alignment (4th lane) & FLHS SB 3rd Lane (North Portion)[TTA no.R-6]	1	1	12-Mar-17	12-Mar-17	0					T8b: TTA to shift F	LHNB Fas
MS-0310	Demolition of the whole Kiu Tau Vehicular Bridge	0	0		14-Mar-17*	0					<ul> <li>Demolition of th</li> </ul>	e whole Kiu
Major Procuren	nent & Delivery											
Footbridge Stee	el Truss											
MM-3010	Fabrication Delivery of Footbridge Steel Truss (incl. KT-AB4, KT-RP3 & KT-P5),	88	24	30-Aug-16 A	20-Jan-17	20					¦ i <sup>1</sup> uss (incl. KT-AB4, KT-RP3 & KT-I	
MM-3020	Western Side Fabrication Delivery of Footbridge Steel Truss (incl. KT-P3, P4, KT-RP-1 & 2, KT-SC-1, KT-AB1 & AB2), Eastern Side	92	30	30-Aug-16 A	27-Jan-17	15			Fabrication De	livery of Footbridge	Steel Truss (incl. KT-P3, P4, KT-F	RP-1 & 2, K
MM-3000	Fabrication Delivery of Footbridge Steel Truss (incl. KT-FB-1-1, 2A & 2B), Fanling	73	27	30-Aug-16 A	16-Jan-17	7		Fabricatio	n Delivery of Foo	otbridge Steel Truss	(ind. KT-FB-1-1, 2A & 2B), Fanlin	g Highway
MM-3030	Highway Section On-Site Welding for Steel Truss KT-FB-1-2A & 2B	14	14	17-Jan-17	08-Feb-17	6			(	On-Site Welding for	Steel Truss KT- FB-1-2A & 2B	
Lift for New Kiu	Tau Footbridge											
MM-4000	Procurement, Fabrication and delivery of Lift	120	120	21-Dec-16	26-May-17	82		-				
Design and Sub	omissions											
Statutory Appro	oval											
PRE-1410	Approval of Lift for BFA for new Kiu Tau Footbridge - HyD	60	0	27-Jul-16 A	28-Nov-16 A		Approval of Li	ift for BFA for new Kiu Tau Footbridge - Hyl				
							, approval of El					
	Actual	Work					EDD Contract No. CV/201	12/09			gramme updated to 2016-03	
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ity ID	Activity Name	OD	RD	Start	Finish	TF	2016 De		Jan		2017 Feb	Mar	Ar
Method Stateme	nt and Design (Major) App roved by AECOM					<u> </u>	De		Jan		Feb	Ivial	A
PRE-2040	Submission of E&M design for lighting inside viaduct structures of Bridge A, B, C & D	60	14	01-Apr-16	A 09-Jan-17	92			Submission of E&M	desian for lia	nting inside viaduct si	ructures of Bridge A, B, C 8	D. Submission
PRE-2030	Submission of E&M design for lighting of Kiu Tau Footbridge	60	14			748					-	bridge, Submission of E&M	
		00	14	00-0ep-10	A 03-341-17	740			Submission of E&IVI	design for ligi	nting of Kiu lau Foot	strage, Submission of E &ivi o	æsign for lightir
Section IA & IB -	- Fanling Highway Wide ning (KD-1 & KD-2)												
Fanling Highway	/ South Portion between CH6935 and CH7470												
Fanling Highwa	y Zone 1 between CH6935 and CH7130 (within SBZ2)												
At-Grade Road	lworks (195m)												
FHW-1220a	Noise Barrier NB68 - Footing at central median (Bay 4, 14m)	63	19	11-Nov-16	A 14-Jan-17	13		_	Noise Barrier	NB68 - Footir	ng at central median	; (Bay 4, 14m), Noise Barrier	NB68 - Footing
FHW-1220b	Noise Barrier NB68 - Footing at central median (Bay 1 - 3, 63m)	68	54	05-Dec-16	A 03-Mar-17	0						Noise Barrier NB68 -	Footing at cent
													-
FHW-1150	Noise Barrier NB70 - Footing adjacent to SB lane (30m)	70	70	21-Dec-16	6 22-Mar-17	21							Noise Barrier N
FHW-1230	Road Formation (Middle Part: FLH NB Fast lanes), except CH.6935 - CH.7035	50	50	29-Dec-16	6 04-Mar-17	6		-				Road Forma	tion (Middle Pa
Fanling Highwa	y Zone 2 between CH7130 and CH7290												
At-Grade Road	lworks (160m)												
FHW-2220	Noise Barrier NB68A - Footing at central median (Bay 1 - 12, 141m)	70	18	27-Jul-16	A 13-Jan-17	7			Noise Barrier N	B68A - Footi	ng at central median	(Bay 1 - 12, 141m), Noise B	arrier NB68A -
FHW-2360	Temporary Platform for Mini-Pile Installation Works within WSD Restriction Zone	37	37	21-Dec-16	* 11-Feb-17*	0					_	orm for Mini-Pile Installation	
FHW-2230	Road Formation & Pavement and Central Barrier (Middle Part: FLH NB 4th lanes)	50	50	29-Dec-16	6 04-Mar-17	6						Road Forma	tion & Paveme
FHW-2370	Construction of opening on the existing retaining wall for piling works	35	35	13-Feb-17	7 24-Mar-17	0							Construction
FHW-2310	Road Formation & Pavement (FLH NB 3rd lane) by re-surfacing	32	32	13-Mar-17	7 22-Apr-17	0							
Fanling Highwa	y Zone 3 between CH7290 and CH7380												
Box Culvert Ex	ctension - ID4												
ID4-3090	Bay 1 - Remaining Base Slab (To be carried out after diversion of DN1400 water	95	75	30-Nov-16	A 28-Mar-17	81							Bay 1 - I
	mains)	55	10	00 1107 10	20 100 17								
At-Grade Road	lworks (130m)												
FHW-3210	Noise Barrier NB68A - Pre-drilling and Mini-Piling at central median (CSD: 20 nos)	50	14	21-May-16	A 09-Jan-17	133			Noise Barrier NB68	A - Pre-drilling	g and Mini-Piling at co	ehtral median (CSD: 20 nos	), Noise Barrier
FHW-3220A	Noise Barrier NB68A - Footing at central median (Bay 13, 30m)	73	0	11-Oct-16	A 23-Nov-16 A			<b>_</b>	Noise Barrier NB68A - Footing a	at central med	ian (Bay 13, 30m)		
FHW-3220B	Noise Barrier NB68A - Footing at central median (Bay 14 - 15, 24m)	32	26	28-Nov-16	A 23-Jan-17	1			Noi	se Barrier NB	68A - Footing at cent	ral median (Bay 14 - 15, 24	m), Noise Barr
FHW-3230	Road Formation & Central Barrier (Middle Part: FLH NB 4th lanes)	55	55	29-Dec-16	6 10-Mar-17	1						Road Forma	tion & Central
FHW-3310	Road Formation & Pavement (FLH NB 3rd lane) by re-surfacing	32	32	13-Mar-17	7 22-Apr-17	0							
	, <i>, , ,</i> , ,	52	52	13-10141-17	22-Api-17								
	/ North Portion between CH7470 and CH7925												
Fanling Highwa	y Zone 4 between CH7380 and CH7470												
		A (1								3-1	Month Rolling Pro	gramme updated to 20	16-03-20
	Actual Actual Remain						CEDD Contract No. CV/2			Date	Revisi	<u> </u>	
		0			Liantang / Heung	g Yue	n Wai BCP - Site Formatio	n & Infrast	ructure Works,	20-Dec-16	Rev.0	SL	
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	Actual		of Effor	+		ann	Page 2 of 10		20010)				

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2016		2017		
At-Grade Road	dworks (90m)						Dec	Jan	Feb	Mar	Apr
FHW-4210	Road Drainage, Road Formation & Pavement (FLH SB 3rd lanes)	30	30	21-Dec	-16 27-Jan-17	0			Road Drainage, Road Formatio	n & Pavement (FLH SB 3rd lane	s)
FHW-4220	Road Formation & Pavement, and Central Barrier (Middle Part: FLH NB 4th lanes)	55	55	29-Dec	-16 10-Mar-17	1				Road Formation	1 & Pavement, a
FHW-4300	Road Formation & Pavement (FLH NB 3rd lane) by re-surfacing	32	32	13-Mar	-17 22-Apr-17	0					
Fanling Highwa	ay Zone 5 between CH7470 and CH7600 (Provision of Kiu Tau Footbridge)										
Kiu Tau Footb	bridge Reprovision (East)										
FHW-5010A1	KT-AB1 (North Portion) - Pile Cap, Abutment and Bearing Installation	65	0	01-Aug-1	16 A 17-Dec-16 A		кт	AB1 (North Portion) - Pile Cap, Abutment a	and Bearing Installation		
FHW-5090	Additional BFA Facilities - Pile Cap & Sump Pit (covered by VO no. 59)	50	18	01-Aug-1	16 A 13-Jan-17	94		Additional BFA		covered by VO no. 59), Additiona	
FHW-5010B	KT-AB2 - Pile Cap, Abutment and Bearing Installation	65	0	04-Aug-	16 A 14-Dec-16 A		KT-AB	2 - Pile Cap, Abutment and Bearing Installa	tion		
FHW-5010A2	KT-AB1 (South Portion) - Pile Cap, Abutment and Bearing Installation	44	13	05-Sep-7	16 A 07-Jan-17	39		KT-AB1 (South P	ortion) - Pile Cap, Abutment and	Bearing Installation, KT-AB1 (So	uth Portion) - P
FHW-5010C2	KT-P2 & P3 - Pier Construction	22	0	03-Nov-	16A 15-Dec-16A		КТ-Р	2 & P3 - Pier Construction			
FHW-5010D3	KT-P4 - RC Deck & Bearing Installation	30	30	21-Dec-	16 A 27-Jan-17	11	- •		KT-P4 - RC Deck & Bearing Ins	tallation, KT-P4 - RC Deck & Bea	iring Installation
FHW-5010C3	KT-P2 & P3 - RC Deck & Bearing Installation	30	30	21-Dec	-16 27-Jan-17	6	i		KT-P2 & P3 - RC Deck & Bearing	ng Installation	
FHW-5030	Erection of Temporary Support and Working Platform at Central Median for Steel	6	6	16-Jan-	17* 21-Jan-17	15	-	Erecti	on of Temporary Support and W	orking Platform at Central Mediar	n for Steel Truss
FHW-5020	Truss Installation Steel Truss Installation at TWSR East	11	11	09-Feb	-17 21-Feb-17	11	-		Ste	el Truss Installation at TWSR Eas	st
FHW-5040	Steel Truss Installation across Fanling Highway	16	16	09-Feb	-17 27-Feb-17	6	-			Steel Truss Installation across	Eanling Highw
FHW-5070	Testing and Commissioning (Overall)	1	1	28-Feb	-17 28-Feb-17	6				Testing and Commis	
FHW-5050	Installation of Bridge Decking and Cladding	12	12	01-Mar		265					f Bridge Deckin
FHW-5060	Installation of Drainage and Lighting Facilities (Overall)	25	25	01-Mar		711				- Installation o	
	BFA Facilities (Lift)	25	25	01-Ivial	23-10141-17	/ 11					- Installation
	RC Works for Lift Shaft	55	55	14-Jan-	-17 25-Mar-17	94					RC Works for L
At-Grade Road	d Works (130m)										
FHW-5130	Completion of Demolition of existing Control Valve House	0	0		06-Dec-16 A		Completion of I	Demolition of existing Control Valve House			
FHW-5150	Road Formation & Pavement (FLH SB 3rd lane)	30	30	21-Dec	-16 27-Jan-17	0			Road Formation & Pavement (I	LH SB 3rd lane)	
FHW-5220	Road Formation & Pavement (FLH NB 4th lane)	31	31	04-Feb	-17 11-Mar-17	0	-			Road Formation	1 & Pavement (
FHW-5140	Demolition of existing Kiu Tau Footbridge	45	45	01-Mar	-17 26-Apr-17	6	-				
FHW-5310	Road Formation & Pavement (FLH NB 3rd lane) by re-surfacing	32	32	13-Mar	-17 22-Apr-17	0					
Fanling Highwa	ay Zone 6 between CH7600 and CH7660 (Existing Vehicular Bridge)										
At-Grade Road	dworks (60m)										
										<u> </u>	
	Actual	Work					CEDD Contract No. CV/2012	/09		rogramme updated to 2016	1
	Remain	ning W	ork		Liantang / Heung	Yue	en Wai BCP - Site Formation &	Infrastructure Works,	Date Revis	sion Checked SL	Approved
	Summa	ary Ba	r				Contract 3		20-Dec-16 Rev.0	5L	
	·建築工程有限公司 Critical	Rema	inina W	/ork			3-Month Rolling Program				<b> </b>
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	Actual						Page 3 of 10				<b> </b>
	Project	t Basel	ine Bar	r 📗					<u> </u>		

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2016			2017		
	-						Dec	Ja	an	Feb	Mar	Apr
FHW-6120	Road Formation & Pavement (FLH SB 1st - 3rd lanes)	30	30	21-Dec-16	27-Jan-17	0			Roa	ad Formation & Pavement (	LH SB 1st - 3rd lanes)	
FHW-6210	Road Drainage, Road Formation & Pavement (FLH SB 4th lane)	158	158	04-Feb-17	16-Aug-17	60						
FHW-6220	Road Formation & Pavement, and Central Barrier (FLH NB 4th lane)	31	31	04-Feb-17	11-Mar-17	0					Road Formation	on & Pavement, ar
FHW-6310	Road Formation & Pavement (FLH NB 3rd lane) by re-surfacing	32	32	13-Mar-17	22-Apr-17	0						
Fanling Highwa	ay Zone 7 between CH7660 and CH7925											
At-Grade Road	dworks (265m)											
FHW-7120	Demolition of Existing Central Barrier and Make Good of Road Pavement for further Traffic Diversion	38	0	22-Aug-16 A	23-Nov-16 A		Demolition of Existing Central	Barrier and Make Good of Ro	ad Pavement for	urther Traffic Diversion		
Remaining Worl	ks for Noise Barrier along widened Fanling Highway											
FHW-NB-120	Noise Barrier Steelworks & Panel for NB6 (123m), adjacent to Fanling Highway SB lanes at Zone 1	20	20	21-Dec-16*	16-Jan-17	252			Noise Barrier St	eelworks & Panel for NB6 (	23m), adjacent to Fanling High	way SB lanes at Z
FHW-NB-130	Noise Barrier Steelworks & Panel for NB7 (60m), adjacent to Fanling Highway SB lanes at Zone 1	10	10	17-Jan-17	27-Jan-17	252			Noi	se Barrier Steelworks & Par	el for NB7 (60m), adjacent to Fa	anling Highway SB
FHW-NB-220	Noise Barrier Steelworks & Panel for NB68A (225m), Fanling Highway central	35	35	24-Jan-17	11-Mar-17	22					Noise Barrier S	Steelworks & Pane
FHW-NB-140	median at Zones 2 & 3 Noise Barrier Steelworks & Panel for NB71 (254m), adjacent to Fanling Highway SB Ianes at Zones 2.3 & 4	45	45	04-Feb-17	28-Mar-17	252		_				Noise Barrier
FHW-NB-210	lanes at Zones 2,3 & 4 Noise Barrier Steelworks & Panel for NB68 (77m), Fanling Highway central median at Zones 1 & 3	13	13	25-Feb-17	11-Mar-17	0				E	Noise Barrier S	Steelworks & Pane
Section II - Rem	at zones 1 & 3 nainder of the Works (KD-3)					<u> </u>						
At Grade Link R	load at Fanling Highway Interchange											
Link Road 1 (n	ear Abut ment AB1)											
·	Noise Barrier NB66 - Footing adjacent NB lane (50m long, Bay 1 - Bay 4)	92	92	06-Feb-17	31-May-17	10						
	Completion of Abutment AB1	0	0	00-1 60-17	18-Feb-17	90				◆ Comp	etion of Abutment AB1	
		0	U		10-Feb-17	90				• comp		
Link Road 2 (no	ear Abut ment AA1)											
FHI-LR2-2000	Completion of Demolition of Existing Vehicular Bridge	0	0		09-Feb-17	167					emblition of Existing Vehicular Br	idge
FHI-LR2-2010	Completion of Abutment AA1	0	0		11-Feb-17	81				<ul> <li>Completion of</li> </ul>	Abutment AA1	
Link Road 3 (no	ear Abut ment AD1)											
FHI-LR3-3010	Completion of Abutment AD1	0	0		21-Dec-16	25		Completion of Abutment AE	01			
FHI-LR3-3020	Construction of Retaining Wall beside Abutment AD1	120	120	23-Jan-17	26-Jun-17	0						
Link Road 4 (ne	ear Abut ment AC1)											
FHI-LR4-4020	Construction of Retaining Wall beside Abutment AC1	120	120	03-Jan-17	06-Jun-17	61						
WSD Works												
DN450 Fire Mai	ins (CHA)											
WA-2010	Pipe Laying - CHA 460 - 500 (DN450) near Ext. TWSR West, 40m	70	43	01-Sep-16 A	18-Feb-17	-46				Pipe L	aying - CHA 460 - 500 (DN450)	near Ext. TWSR \
	Actual	Work					CEDD Contract No. CV/2012	2/09		3-Month Rolling P Date Revi	rogramme updated to 2016 sion Checked	-
	Remain	•		L	iantang / Heung	g Yue	n Wai BCP - Site Formation 8	Infrastructure Works	, 20	-Dec-16 Rev.0	Sion Checked	Approved
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	Actual	Level o	of Effort				Page 4 of 10					
	Project	t Baseli	ine Bar									

Activity ID	Activity Name	OD	RD	Start	Finish	TF		2016			2017			
								Dec	Jan		Feb	Mar		Apr
WA-3010	Pipe Laying - CHA 675 - 720 (DN450) near Ext. TWSR West, 45m	80	28	19-Sep-16 A	25-Jan-17	-26			F	Pipe Laying - Cl	HA 675 - 720 (DN45	0) near Ext. TWSR We	st, 45m, Pip	e Laying - Cl
WA-3020	Pipe Laying - CHA 720 - 765 (DN450) near Ext. TWSR West, 45m	85	85	26-Jan-17	18-May-17	-26								
WA-1100	Pipe Laying - CHA 360 - 385 (DN450) near Ext. TWSR West, 25m	50	50	18-Feb-17	21-Apr-17	0				_				<u></u>
WA-2020	Pipe Laying - CHA 500 - 540 (DN450) near Ext. TWSR West, 40m	70	70	20-Feb-17	18-May-17	-46		_						
DN600 Water I	Mains (CHB)											}		
WB-1030C	Pipe Laying - CHB 410 - 510 (DN600) from Portal AB7/AD9/AC12 to Realigned TWSR East	35	18	01-Nov-16 A	13-Jan-17	21			Pipe Laying - C	HB 410 - 510	(DN600) from Porta	AB7/AD9/AC12 to Rea	igned TWS	SR East, Pipe
WB-1030B	Pipe Laying - CHB 360 - 460 (DN600) from TWSRE to Portal AB7/AD9/AC12	45	45	06-Feb-17	29-Mar-17	8								Pi
DN1200 Water	Mains (CHC)													
WC-1090C	Pipe Laying - CHC 715 - 810 (DN1200) from Portal AB7/AD9/AC12 to Realigned TWSR East	35	35	06-Jul-16 A	09-Feb-17	4					Pipe Laying - CHC	715 - 810 (DN1200) fro	m Portal Af	B7/AD9/AC1:
WC-1090B	Pipe Laying - CHC 615 - 715 (DN1200) from TWSRE to Portal AB7/AD9/AC12	45	45	06-Feb-17	29-Mar-17	8								P
Twin DN1400 V	Nater Mains (CHE & CHG)													
WE-1050	Pipe Laying - CHE & CHG 300 - 380 (Twins DN1400) from Portal AB7AD9/AC12 to	131	114	12-Dec-16 A	19-May-17	0								
WE-1040	new connection point Pipe Laying - CHE & CHG 220 - 300 (Twins DN1400) from TWSRE to Portal	45	45	06-Feb-17	29-Mar-17	8								
	AB7/AD9/AC12				20 mai 11									
DN2200 Water														
WF-1050 A	Construction of Launching Pit for DN2200 (CHF), Section 3	55	55	29-Dec-16	10-Mar-17	7						Co	struction o	of Launching F
WF-1000B	Construction of Launching Pit for DN2200 (CHF), Section 1 (near Pier AB3)	60	60	29-Dec-16	16-Mar-17	77							<ul> <li>Constru</li> </ul>	uction of Laun
WF-1000A	Construction of Receiving Pit for DN2200 (CHF), Section 1 (near Pier AA8)	60	60	07-Mar-17	22-May-17	26								<u> </u>
WF-1060	Excavation - CHF 83 - 113 (DN2200) across Box Culvert BC01 by Trenchless Method, 30m long	150	150	11-Mar-17	11-Sep-17	7								
DN2300 Water	Mains and Leakage Collection System (CHJ & CHKA/CHK)													
WJ-3010	Pipe Laying - CHK 0 - 80 (DN1400) near Realigned TWSR East, 80m long & 4m depth	55	35	17-Sep-16 A	09-Feb-17	49					Pipe Laying - CHK	0 - 80 (DN1400) near F	ealigned T	WSR East, 8
WJ-3030	Pressure Test for CHK/CHKA	7	7	10-Feb-17	17-Feb-17	267					Pressure	Test for CHK/CHKA		
Kau Lung Hang	g Valve Control & Telemetry House Reprovision													
VCTH-1060	Demolition of Existing KLH Valve Control & Telemetry House	75	0	19-Sep-16 A	06-Dec-16 A			De	emolition of Existing KLH Valve Control & Tel	emetry House				
Existing Nam V	Va Po Trunk Sewage Pumping Station (PST3)													
PS-1000	Demolition of Existing Boundary Wall of Pumping Station (PST3)	50	35	15-Nov-16 A	09-Feb-17	752					Demolition of Existir	g Boundary Wall of Pu	nping Statio	on (PST3), D
PS-1010	Construction of New Boundary Wall for Pumping Station (PST3)	80	72	12-Dec-16 A	24-Mar-17	57								<u> </u>
Stage 1A - Rea	lignment of Tai Wo Service Road West (KD-7)													
TWSRW Zone 1	betweeen CH100 and CH155													
At-Grade Road	aworks													
	Actual	Work					CEDD Co	ntract No. CV/201	2/09	3-N	Ionth Rolling Pro	gramme updated to	2016-03	-20
	Remain	ning W	ork		iantang / Heung	1 Yua			& Infrastructure Works,	Date	Revisio		ed A	Approved
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	Actual						I	Page 5 of 10						
	Project	t Basel	ine Bar											

Activity ID	Activity Name	OD	RD	Start	Finish	TF		2016				2017			
								Dec		Jan		Feb		Mar	Apr
TWSRW-11	160B Remaining Road Formation & Pavement connecting to FHW3 Contractor	28	0	03-Nov-1	6 A 07-Dec-16 A				- Rema	ining Road Formation & Paveme	nt connecting	to FHW3 Contracto	r		
TWSRW Zon	e 2 betweeen CH155 and CH280														
At-Grade Re	oadworks														
TWSRW-21	150 Rectification Works for Southern Trunk Sewer (STS10_440 - STS10_460)	58	0	12-Sep-1	6 A 25-Nov-16 A		Rec	afication Works for Sou	thern Trunk	Sewer (STS10_440 - STS10_46	D)				
TWSRW-21	160 Remaining Road Drainage (i.e. conflict with sewer rectification works)	25	7	26-Nov-1	6 A 30-Dec-16	0				Remaining Road Drainage (i.e.	conflict with s	sewer rectification wo	ks) Remain	ing Road Drainage	(i.e. conflict with
	130C Remaining Road Formation & Pavement (above Southern Trunk Sewer)		30			-									
		30	30	21-Dec-7	16 27-Jan-17	0					Remaining R	oad Formation & Pa	vement (abo	ve Southern Trunk S	ewer)
TWSRW Zon	e 4 betweeen CH315 and CH376														
Constructio	on of Bridge E														
TWSRW-41	100C Construction of Gabion Wall and Remaining Slope Reinstatement Works	68	68	03-Jan-1	7* 29-Mar-17	252									Constructi
TWSRW Zon	e 5 betweeen CH376 and CH520														
At-Grade Re	oadworks														
TWSRW-51	120A Filling Works between Retaining Wall RW7 and RW8	192	51	07-Jun-16	6 A 28-Feb-17	139							Eilling Way	rks between Retainir	Mall PW/7 or
													-		-
	160 Construction of Extended Podium near RW7 incl. demolition of existing staircase and filling works (covered by VO No.100)	85	49	27-Oct-16	6 A 25-Feb-17	80						(	Construction o	of Extended Podium	near RW7 incl.
TWSRW-51	100C Remaining Retaining Wall RW7 - Bay 7001 (6.7m) (covered by VO No.100)	30	30	18-Nov-1	6 A 27-Jan-17	243	-				Remaining R	etaining Wall RW7 -	Bay 7001 (6.	.7m) (covered by VC	) No.100), Rem
TWSRW-51	110D Remaining Retaining Wall RW9 - Bay 9001 & Coping Block (covered by VO No.116)	55	55	04-Feb-	17 10-Apr-17	243									
TWSRW-51	120B Permanent Vehicular Access to Lot 81 (incl. filling works behind retaining wall RW8)	48	48	01-Mar-	17 29-Apr-17	139				_					
TWSRW Zon	e 7 betweeen CH530 and CH640														
At-Grade Re	oadworks														
TWSRW-71	190 Implementation of TTA - Scheme W3C (shift TWSRW SB traffic westward, i.e.	0	0	20-Feb-	17	160						♦ Implen	hentation of T	TA - Scheme W 3C	(shift TWSRW \$
	permanent alignment)		-												
	e 8 betweeen CH640 and CH695														
Kiu Tau Foo	otbridgeReprovision (West)														
TWSRW-80	020A KT-P1 & P5 - Pier Construction	28	0	01-Nov-1	6 A 22-Nov-16 A		KT-P1 a	P5 - Pier Construction	n						
TWSRW-80	020A KT-P1 & P5 - RC Deck & Bearing Installation	30	28	19-Dec-1	6 A 25-Jan-17	12				K	-P1 & P5 - R	C Deck & Bearing In	stallation, KT	-P1 & P5 - RC Deck	& Bearing Inst
TWSRW-80	040 Steel Truss Installation at TWSR West	12	12	21-Jan-1	17 10-Feb-17	20					-	Steel Truss Install	ation at TWS	R West	
At-Grade Re	oadworks														
TWSRW-81	100 Fill Replacement Works	95	95	11-Feb-1	17 09-Jun-17	72									
Remainder o	·														
Utilities Lay	/ing works														
UU-1040A	Utilities Duct Laying in Area 4, Phase 2, Towngas - DN600 & DN400, approx. 50m (by their own TTA)	121	114	15-Sep-1	6 A 19-May-17	543									
	Actual	Work						(	2/22		3-N	Month Rolling Pro	gramme u	pdated to 2016-0	)3-20
	Remain		/ork		Linutany (11)	v		tract No. CV/2012			Date	Revisi	<u> </u>	· · · · ·	Approved
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UU-1030B	Utilities Duct Laying in Area 3, Temp Works, Towngas - DN400, approx. 30m	25	25	01-Nov-	16 A 21-Jan-17	10			Utilitie	s Duct Laying in Ar	ea 3, Temp Work	s, Towngas - DN400, approx. 3	0m, Utilities D
Switch-Over of I	Existing Utilitiess												
UU-SO-2000	Cabling Works for CLP 132kV (300mVA)	21	0	05-Dec-	16 A 17-Dec-16 A		=	Cat	bling Works for CLP 132kV (300mVA)				
UU-SO-1010	Cabling Works for telecom utilities	270	270	21-Dec	-16 16-Sep-17	-14							
UU-SO-2020	Cabling Works for CLP 11kV	21	21	21-Dec	16* 17-Jan-17	19		C	Cabling W	orks for CLP 11kV			
UU-SO-2500	Switch-over Works (CLP 132kV, 300mVA)	90	90	01-Jan-	17* 31-Mar-17	46							Switch-o
UU-SO-2520	Switch-over Works (CLP 11kV)	90	90	18-Jan-	17* 17-Apr-17	29							
UU-SO-3520	Temporary Diversion of DN400 Gas Mains	6	6	23-Jan-	17* 04-Feb-17	10		Ļ		Tempora	ry Diversion of D	N400 Gas Mains	
Stage N4A & N4	B - Realignment of Tai Wo Service Road East (KD-13 & KD-14)												
TWSRE Zone 1 b	etween CH100 and CH270												
At-Grade Roadv	vorks												
TWSRE-1140B*	Pipe laying - DN600 & DN1200 Watermains (CHB & CHC) along Realigned TWSR	106	76	06-Jul-1	6 A 29-Mar-17	8		<mark>-</mark>	·····				Pipe laying
TWSRE-1140A*	Pipe laying - DN1400 Watermains (CHKA) along Realigned TWSR East	90	9	17-Sep-	16 A 03-Jan-17	0			Pipe laying - DN1400 Wat	ermains (CHKA) al	ong Realigned T	WSR East	
TWSRE-1170	Remaining Noise Barrier NB3 Stem Wall (a total of 24m long)	45	45	10-Feb	-17 03-Apr-17	4					_		Rem
TWSRE Zone 2 b	etween CH270 and CH380												
At-Grade Roadv	vorks												
TWSRE-2030B*	Pipe laying - DN1400 Watermains (CHK) along Realigned TWSR East	55	35	17-Sep-	16 A 09-Feb-17	49				Pip	e laying - DN140	0 Watermains (CHK) along Re	aligned TWSR
TWSRE-2060B	Demolition of Existing Kiu Tau Vehicular Bridge (Portion 2), above existing TWSRE	35	35	21-Dec	-16* 09-Feb-17	28		C				Demolition of	Existing Kiu Ta
TWSRE-2060C	Demolition of Existing Kiu Tau Vehicular Bridge (Portion 3), above new TWSRE	35	35	21-Dec	·16* 09-Feb-17	28				De	molition of Existin	g Kiu Tau Vehicular Bridge (Po	rtion 3), above
TWSRE-2080	Remaining Noise Barrier NB3 Stem Wall (total 2 bays)	45	45	10-Feb	-17 03-Apr-17	52							Rema
Stage 1C - Viadu	ict Structure & TCSS Civil Provisions (KD-9)												
Foundation & Pi	er Construction												
Bridge A													
BA-08-1030	Pier AA8 - Pier Construction	35	0	18-Oct-1	16 A 01-Dec-16 A		Pier AA8	- Pier Const	ruction				
BA-02-1050	Portal AA2 - Portal Beam Construction together with Kicker	72	0	29-Oct-	16 A 20-Dec-16 A				Portal AA2 - Portal Bear	Construction ton	ether with Kicker		
BA-06-1030	Pier AA6 - Pier Construction	35	19	14-Nov-	16 A 14-Jan-17	26				r Construction, Pie		struction	
BA-01-1020B	Abutment AA1 - Abutment Wal	32	32			41						A1 - Abutment Wal	
	Abutment AA1 - Plinth Construction	5	5			41						ment AA1 - Plinth Construction	
Bridge B		-											
Bridge B													
	Actual	Work					CEDD Contract No	. CV/2012	/09			ramme updated to 2016-	
	Remai	ning W	Vork		Liantang / Heung	ı Yue			Infrastructure Works,	Date	Revisior		Approved
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Activity ID	Activity Name	OD	RD	Start	Finish	TF		2016			2017		
								Dec		Jan	Feb	Mar	Apr
BB-12-1020B	Abutment AB12/AD14 - Abutment Wall	120	18	15-Aug-16 A	13-Jan-17	0				Abutment AB12	AD14 - Abutment Wall, Abutme	nt AB12/AD14 - Abutment Wall	
BB-04-1030	Pier AB4 - Pier Construction	35	6	03-Oct-16 A	29-Dec-16	18				Pier AB4 - Pier Construction, Pie	r AB4 - Pier Construction		
BB-02-1020	Pier AB2 - Pile Cap	35	0	13-Oct-16 A	30-Nov-16 A			Pier AB2 - Pile Cap					
BB-01-1020	Abutment AB1 - Pile Cap	16	1	19-Oct-16 A	21-Dec-16	30			Abutmer	nt AB1 - Pile Cap, Abutment AB1	- Pile Cap		
BB-02-1030	Pier AB2 - Pier Construction	7	7	21-Dec-16	30-Dec-16	19				Pier AB2 - Pier Construction			
BB-01-1020B	Abutment AB1 - Abutment Wal	32	32	22-Dec-16	07-Feb-17	30					Abutment AB	1 - Abutment Wal	
BB-12-1020C	Abutment AB12/AD14 - Plinth Construction	14	14	14-Jan-17	06-Feb-17	0					Abutment AB12/AD1	4 Plinth Construction	
BB-01-1020C	Abutment AB1 - Plinth Construction	10	10	08-Feb-17	18-Feb-17	30						Abutment AB1 - Plinth Construction	on
Bridge D													
BD-11-1030	Pier AD11E - Pier Construction	35	3	07-Nov-16 A	23-Dec-16	1			🗖 Pier A	D11E - Pier Construction, Pier Al	011E - Pier Construction		
BD-11-1050	Portal AD11 - Portal Beam Construction together with Kicker	55	55	05-Jan-17	16-Mar-17	1			_			Portal AD1	1 - Portal Beam (
Pier Table Con s	itruction												
Bridge A													
PA-1080	Pier Table Construction at Pier AA8 (3 nos.)	30	30	20-Dec-16 A	27-Jan-17	0					Pier Table Construction at Pier	A8 (3 nos.), Pier Table Constructi	on at Pier AA8 (3
PA-1020	Pier Table Construction at Portal AA2 (2 nos.)	21	21	17-Jan-17	16-Feb-17	18						Pier Table Construction at F	Portal AA2 (2 nos
PA-1060	Pier Table Construction at Pier AA6 (3 nos.)	35	35	08-Feb-17	20-Mar-17	26		_				Pier Ta	ble Construction
Bridge B													
PB-1060	Pier Table Construction at Portal AB6 (2 nos.)	15	15	21-Dec-16	10-Jan-17	18				Pier Table Constru	ction at Portal AB6 (2 nos.)		
PB-1040	Pier Table Construction at Pier AB4 (3 nos.)	30	30	09-Jan-17	18-Feb-17	18					Pier Ta	ble Construction at Pier AB4 (3 no	os.)
PB-1020	Pier Table Construction at Pier AB2 (3 nos.)	30	30	18-Jan-17	28-Feb-17	19						Pier Table Construction at Pie	r AB2 (3 nos.)
Bridge D													
PD-1030	Pier Table Construction at Portal AD3 (2 nos.)	15	0	09-Nov-16 A	26-Nov-16 A		P	er Table Construction at	Portal AD3	(2 nos.)			
PD-1080	Pier Table Construction at Portal AC11/AD8 (4 nos.)	12	0	28-Nov-16 A	12-Dec-16 A			Pier Tab	le Construc	tion at Portal AC11/AD8 (4 nos.)			
PD-1120B	Pier Table Construction at Pier AD12 (4 nos.)	15	15	21-Dec-16	10-Jan-17	-10				Pier Table Constru	ction at Pier AD12 (4 nos.)		
PD-1130	Pier Table Construction at Pier AD13 (4 nos.)	15	15	17-Feb-17	06-Mar-17	18						Pier Table Construction	n at Pier AD13 (4
Viadu ct Bridge	Segement Erection												
Bridge A													
EA-1090	Bridge Deck Construction at Pier AA9 by Typical Lifting Frame (13 nos)	8	3	15-Dec-16 A	23-Dec-16	8				<ul> <li>Bridge Deck Construction at F</li> </ul>	ier AA9 by Typical Lifting Frame	(13 nos), Bridge Deck Constructio	on at Pier AA9 by
EA-1180	Bridge Deck Construction at Pier AA18 by Typical Lifting Frame (24 nos)	9	9	10-Jan-17	19-Jan-17	8						on at Pier AA18 by Typical Lifting	
	P 建	l Work iining W nary Bai al Rema one I Level c	r ining V	/ork		:	n Wai BCP S-Month ne ID: 3M	ntract No. CV/2012 - Site Formation & Contract 3 Rolling Program IPR041 (Data D	k Infrasti nme		3-Month Kolling P Date Revis 20-Dec-16 Rev0	rogramme updated to 2016- sion Checked SL	Approved
		ct Basel						Page 8 of 10					

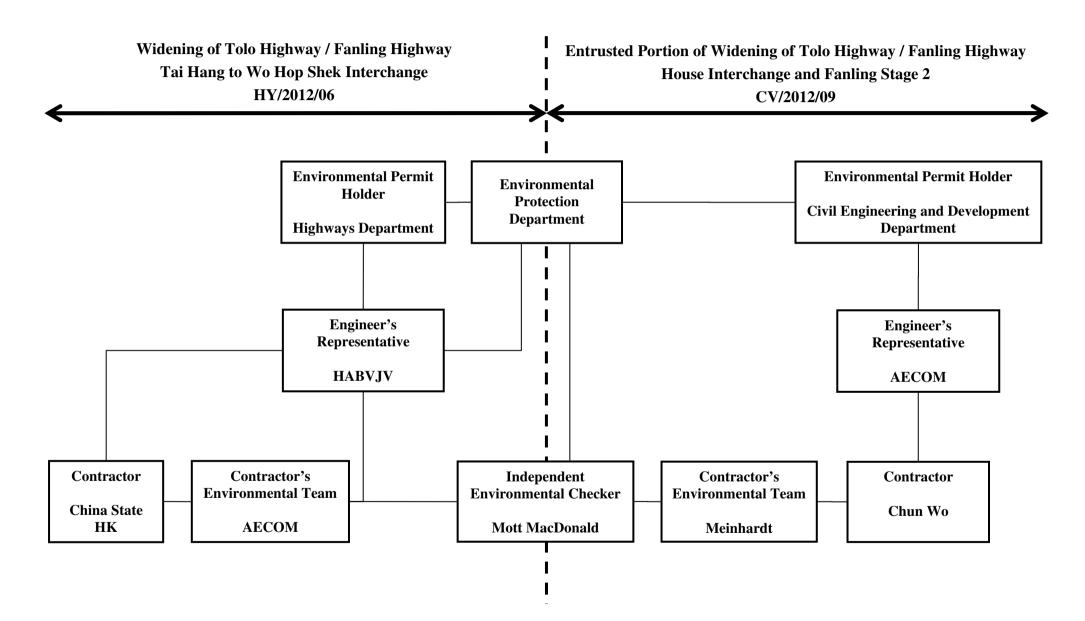
Activity ID	Activity Name	OD	RD	Start	Finish	TF	2016		2017		
EA 4000	Deides Dark Organization of Disc AAO has Trained Lifeton Frances (40 and			00 5-1 47	47 5-1-47		Dec	Jan	Feb	Mar	Apr
EA-1080	Bridge Deck Construction at Pier AA8 by Typical Lifting Frame (16 nos)	8	8	09-Feb-17	17-Feb-17	0			Bridge D	eck Construction at Pier AA8 I	by Typical Lifting Fra
EA-1010A	Erection of Segment AA1U0	27	27	13-Feb-17	15-Mar-17	41					<ul> <li>Erection of Seg</li> </ul>
EA-1020	Bridge Deck Construction at Portal AA2 by Crane (14 nos)	35	35	17-Feb-17	29-Mar-17	36					
Bridge B											
EB-1110	Bridge Deck Construction at Pier AB11 by Special Lifting Frame (52 nos in which 20 nos above MTR Railway)	107	46	21-Sep-16 A	22-Feb-17	-28			Brid	dge Deck Construction at Pier	AB11 by Special Lift
EB-1030	Bridge Deck Construction at Pier AB3 by Typical Lifting Frame (22 nos)	23	0	17-Nov-16 A	13-Dec-16 A		в	ridge Deck Construction at Pier AB3 by Typ	cal Lifting Frame (22 nos)		
EB-1060	Bridge Deck Construction at Portal AB6 by Typical Lifting Frame (24 nos)	6	6	23-Jan-17	04-Feb-17	8			Bridge Deck	Construction at Portal AB6 by	Typical Lifting Fram
EB-1120A	Erection of Segment AB12U0	31	31	07-Feb-17	14-Mar-17	0				Erection of	Segment AB12U0
EB-1010A	Erection of Segment AB1U0	27	27	20-Feb-17	22-Mar-17	30					Erection of Se
EB-1040	Bridge Deck Construction at Pier AB4 by Typical Lifting Frame (22 nos)	30	30	24-Feb-17	30-Mar-17	18					Bridge Deck
EB-1020	Bridge Deck Construction at Pier AB2 by Crane (20 nos)	12	12	06-Mar-17	18-Mar-17	19				Bridge	Deck Construction
Bridge C											
EC-1010A	Erection of Segment AC1U0	27	0	17-Oct-16 A	29-Nov-16 A		Erection of Segment A	C1U0			
EC-1110	Bridge Deck Construction at Portal (AC11/AD8) by Crane (12 nos)	7	6	20-Dec-16 A	29-Dec-16	85		Bridge Deck Construction at Po	rtal (AC11/AD8) by Crane (12 nos	), Bridge Deck Construction a	t Porta (AC11/AD8)
EC-1010C	Bridge Deck Construction at Abutment AC1 (End-span) by Falsework & Crane (16	8	8	21-Dec-16	31-Dec-16	61				Bridge	Deck Construction
Bridge D	nos)										
ED-1010A	Erection of Segment AD1U0	27	0	19-Nov-16 A	16-Dec-16 A		Ere	ction of Segment AD1U0			
ED-1030	Bridge Deck Construction at Portal AD3 by Crane (12 nos)	6	0	05-Dec-16 A	14-Dec-16 A		Bridge	Deck Construction at Portal AD3 by Crane	e (12 nos)		
ED-1010B	Bridge Deck Construction at Abutment AD1 (End-span) by Falsework & Crane (13	22	22	24-Dec-16	21-Jan-17	0			e Deck Construction at Abutment	AD1 (End-span) by Falsework	& Crane (13 nos)
ED-1080	nos) Bridge Deck Construction at Portal (AD8/AC11) by Crane (14 nos)	8	8	29-Dec-16	07-Jan-17	8		Bridge De	ck Construction at Portal (AD8/AC	(11) by Crane (14 nos)	
ED-1140A	Erection of Segment AD14U0	40	40	07-Feb-17	24-Mar-17	6				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Erection of Segme
ED-1120	Bridge Deck Construction at Pier AD 12 by Special Lifting Frame (50 nos in which 21	79	79	13-Feb-17	22-May-17	-28					2.000 or elegine
Major Works on	nos above MTR Railway)										
	-stressing and Parapet Installation	15	15	04.5.40	10.1.17						
C-1300	Permanent Prestressing for Bridge A3 (AA9-AA13)	15	15	24-Dec-16	13-Jan-17	118			ent Prestressing for Bridge A3 (A4		
C-3200	Permanent Prestressing for Bridge C2 (AC5-AC12)	15	15	30-Dec-16	17-Jan-17	85	=	Permaner	nt Prestressing for Bridge C2 (AC5	5-AC12)	
C-3100	Permanent Prestressing for Bridge C1 (AC1-AC5)	15	15	03-Jan-17	19-Jan-17	83					Perr
C-4200	Permanent Prestressing for Bridge D2 (AD5-AD8)	15	15	09-Jan-17	25-Jan-17	109				tressing for Bridge D2 (AD5-A	D8)
C-1310	Parapet Installation for Bridge A3 (AA9-AA13)	51	51	14-Jan-17	21-Mar-17	259					<ul> <li>Parapet Installa</li> </ul>
	建築工程有限公司 Wo Construction & Engineering Co., Ltd. ◆ ◆ Milesto Project	ning W ary Bar Remai ne Level c	r ining W of Effort	′ork			CEDD Contract No. CV/2012 n Wai BCP - Site Formation & Contract 3 3-Month Rolling Program ne ID: 3MPR041 (Data D Page 9 of 10	k Infrastructure Works, nme	3-Month Rolling Pro	ogramme updated to 201 ion Checked SL 	6-03-20 Approved

Activity ID		Activity Name	OD	RD	Start	Finish	TF	2016			2017		
								Dec	Jan		Feb	Mar	Apr
C-32	210	Parapet Installation for Bridge C2 (AC5-AC12)	63	63	18-Jan-17	08-Apr-17	244						Pa
C-14	400	Permanent Prestressing for Bridge A4 (AA13-AA18)	15	15	20-Jan-17	13-Feb-17	98		[		Perm	anent Prestressing for Bridge A	4 (AA13-AA18)
C-31	110	Parapet Installation for Bridge C1 (AC1-AC5)	58	58	20-Jan-17	05-Apr-17	247						
C-41	100	Permanent Prestressing for Bridge D1 (AD1-AD5)	15	15	23-Jan-17	15-Feb-17	97				Permanent F	restressing for Bridge D1 (AD1	AD5)
C-42	210	Parapet Installation for Bridge D2 (AD5-AD8)	47	47	26-Jan-17	28-Mar-17	253						Pa
C-14	410	Parapet Installation for Bridge A4 (AA13-AA18)	55	55	14-Feb-17	22-Apr-17	235						
C-41	110	Parapet Installation for Bridge D1 (AD1-AD5)	42	42	16-Feb-17	06-Apr-17	246						Para
Road	lworks, R	Road Facilities and Miscellaneous inside Viaduct Internal Voids				,							
RS-1	1020	Movement Joints and Road Furniture incl. Deck Drainage, Lightings, Steel Rails,NB, Water Main for Bridge C	150	150	20-Jan-17	29-Jul-17	83		C				
Sectio	on VI - We	orks in Portion FH9 (KD-6A)											
Major	Works												
S6-20	000*	Construction of Abutment AB12/AD14 (including Piling, Pile Cap & Abutment construction)	276	32	06-Feb-15 A	06-Feb-17	0				Construction of Abutme	nt AB12/AD14 (including Piling,	Pile Cap & Abut
S6-40		Falsework Erection for Installation of Bridge Deck at Abutment AB12	45	45	23-Jan-17	22-Mar-17	0					False	work Erection fo
S6-40		Falsework Erection for Installation of Bridge Deck at Abutment AD14	45	45	08-Feb-17	31-Mar-17	0						Falsework
		& Establishment Works (KD-4, 4A, 5, 5A, 6)											
		mainder of Landscaping Softworks Not Included in Secton IIIA											
S3-10	020	Remaining Drainage Works and Land Formation at FH3, FH4, FH5	90	90	27-Jan-17	25-May-17	25						
		Actual						CEDD Contract No. CV/2012	/09	-	3-Month Rolling Pro	gramme updated to 2016-	03-20 Approved
		Remai	-		Liar	ntang / Heung	Yue	n Wai BCP - Site Formation &	Infrastructure Works,	2	Date Revisio	SL Checked	линолеа
	俗利	□ 建築工程有限公司 Summ	-					Contract 3		F			
$\sim$		WO CONSTRUCTION & ENGINEERING CO. LTD		ning V	/ork			3-Month Rolling Program					
						Progra	amn	ne ID: 3MPR041 (Data Da	ate: 21-Dec-16)				
			Level					Page 10 of 10		-			
		Projec	t Baseli	ne Ba	r								



# Appendix B Project Organization Structure







# Appendix C Calibration Certificates of Monitoring Equipment



Hong Kong Calibration Ltd. 香港校正有限公司

## **Calibration Certificate**

Certificate No.	607984		Page	1 of 2 Pages
Customer :	Enovative Environmental Service	Limited		
Address :	Flat 6, 3/F, Block E, Wah Lok Inc	lustrial Centre, 31-3	35 Shan Mei Stree	et, Shatin, N.T., Hong Kong.
Order No. :	Q63261		Date of receipt	: 6-Sep-16
Item Tested				
Description :	Sound Level Calibrator			
Manufacturer :	Rion		I.D.	: 215901
Model :	NC-74		Serial No.	: 34857296
Test Conditi	ons			
Date of Test :	23-Sep-16		Supply Voltage	:
Ambient Temp			Relative Humid	ity: (50 ± 25) %
Test Specifi	cations			
Calibration chee	ak			
	/Procedure : F21, Z02, IEC 60942			
Her. Boodinent	11000dulo : 1 2 1, 202, 120 000 -			
Test Results	5			
All results were	within the IEC 60942 Class 1 spe	ecification.		
	shown in the attached page(s).			
Main Test equi	pment used:			
Equipment No.	Description	Cert. No.		Traceable to
S014	Spectrum Analyzer	605758		NIM-PRC & SCL-HKSAR
S240	Sound Level Calibrator	601604		NIM-PRC & SCL-HKSAR
S041	Universal Counter	607883		SCL-HKSAR
S206	Sound Level Meter	605757		SCL-HKSAR
will not include allo overloading, mis-h for any loss or dan The test equipmer	n this Calibration Certificate only relate to owance for the equipment long term drift, andling, or the capability of any other labor nage resulting from the use of the equipm at used for calibration are traceable to Inter oply to the above Unit-Under-Test only	variations with environm pratory to repeat the me lent.	iental changes, vibrati asurement. Hong Kor	on and shock during transportation, ng Calibration Ltd. shall not be liable
	(			Λο
Calibrated by		Ар	proved by :	Hen
This Certificate is issued Hong Kong Calibration I		Dat	e: 23-Sep-16	Alan Unu

Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong. Tel: 2425 8801 Fax: 2425 8646



## **Calibration Certificate**

#### Certificate No. 607984

Page 2 of 2 Pages

Results :

### 1. Generated Sound Pressure Level

UUT Nominal Value (dB)	Measured Value (dB)	IEC 60942 Class 1 Spec.
94	94.1	± 0.4 dB

Uncertainty :  $\pm 0.1 \text{ dB}$ 

2. Short-term Level Fluctuation : 0.0 dB IEC 60942 Class 1 Spec. : ± 0.1 dB Uncertainty : ± 0.01 dB

#### 3. Frequency

UUT Nominal Value (kHz)	Measured Value (kHz)	IEC 60942 Class 1 Spec.
1	1.002 1	± 1 %

Uncertainty :  $\pm$  3.6 x 10 <sup>-6</sup>

4. Total Distortion : < 1.3 % IEC 60942 Class 1 Spec. : < 3 % Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1018 hPa.

----- END -----

#### TSP Sampler Calibration

Location: Lian Tang 3	Date: November 5, 2016
Sampler: TE-5170 MFC (Serial # : 2359)	Tech: Sam Wong

		-			
Barometric Pressure	(in Hg):	39.90	Corrected Pressure	(mm Hg):	1013
Temperature	(deg F):	78	Temperature	(deg K):	299
Average Press.	(in Hg):	39.90	Corrected Average	(mm Hg):	1013
Average Temp.	(deg F):	78	Average Temp.	(deg K):	299

	CALIBRATION ORIFICE				
Make: Model: Serial#:	TE-5025A	Qstd Slope: Qstd Intercept: Date Certified:	2.00411 -0.03059 March 14, 2016		

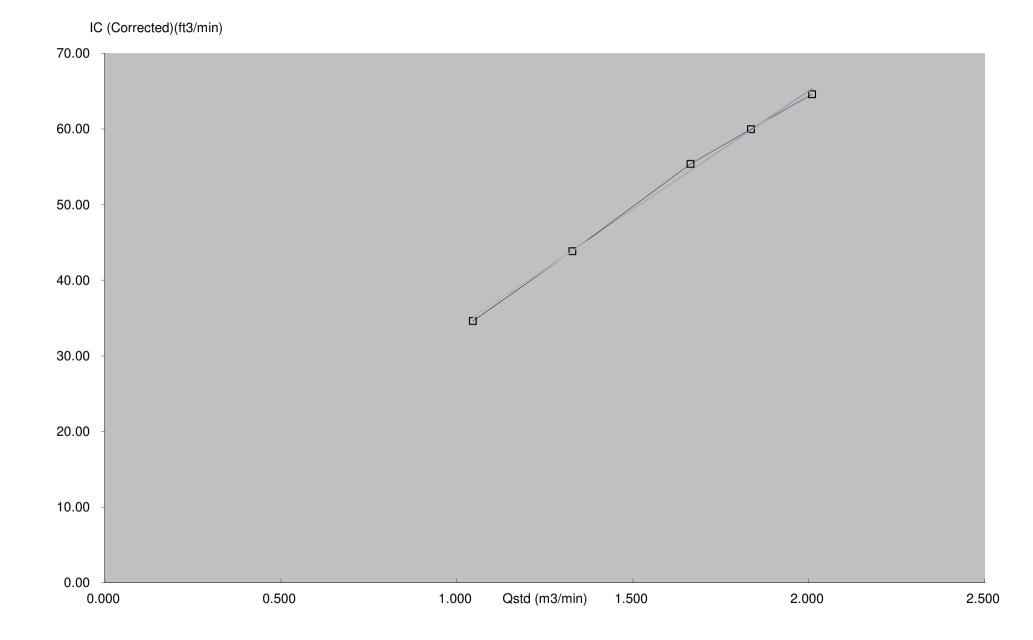
	CALIBRATIONS					
Plate or Test #	H2O (in)	Qstd (m3/min)	I (chart)	IC (corrected)	LINEAR REGRESSION	
1	12.00	2.009	56.0	64.61	Slope =	31.4853
2	10.00	1.836	52.0	59.99	Intercept =	2.0532
3	8.20	1.664	48.0	55.38	Corr. coeff.=	0.9987
4	5.20	1.328	38.0	43.84		
5	3.20	1.045	30.0	34.61	<pre># of Observations:</pre>	5

Calculations

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]
Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]

m = sampler slope b = sampler intercept I = chart response Tav = daily average temperature Pav = daily average pressure





TISCH ENVIRONMENTAL, INC. 145 SOUTH MIAMI AVE VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX

9

#### ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Ma Operator		6 Rootsmeter Orifice I.I		438320 1612	Ta (K) - Pa (mm) -	295 745.49
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA	NA NA NA NA	1.00 1.00 1.00 1.00 1.00	1.3770 0.9710 0.8710 0.8310 0.6860	3.2 6.4 7.8 8.7 12.6	2.00 4.00 5.00 5.50 8.00

#### DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
0.9866 0.9824 0.9804 0.9793 0.9741	0.7165 1.0117 1.1256 1.1785 1.4200	1.4078 1.9909 2.2259 2.3345 2.8155		0.9957 0.9914 0.9894 0.9883 0.9830	0.7231 1.0210 1.1360 1.1893 1.4330	0.8896 1.2581 1.4066 1.4753 1.7792
Qstd slop intercept coefficie	(b) = ent (r) =	2.00411 -0.03059 0.99995	n e n	Qa slope intercept coefficie	t (b) = ent (r) =	1.25494 -0.01933 0.99995
y axis =	SQRT [H20 (B	Pa/760) (298/5	Γa)]	y axis =	SQRT [H2O (	[a/Pa)]

#### CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa] Qa = Va/Time

For subsequent flow rate calculations:

Qstd =  $1/m\{[SQRT(H2O(Pa/760)(298/Ta))] - b\}$ Qa =  $1/m\{[SQRT H2O(Ta/Pa)] - b\}$ 



專業化驗有限公司 OUALITY PRO TEST-CONSULT LIMITED

Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

### **Report of Equipment Performance Check/Calibration**

Test Report No.:AF120113Date of Issue:20 December, 2016Page No.:1 of 2

#### PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Rm 811, Hin Pui House, Hin Keng Estate, Tai Wai New Territories, Hong Kong Attn: Mr. Thomas WONG

#### PART B – DESCRIPTION

Name of Equipment	:	YSI Professional Plus (Pro Plus) Multiparameter with	sensor	probe
Manufacturer	:	YSI (a xylem brand)		
Serial Number		IOD 101566		
Client's Reference Number	1			
Date of Received	:	16 Dec, 2016		
Date of Calibration	:	16 Dec, 2016		
Date of Next Calibration(a)	:	16 Mar, 2017		

#### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method	
pH at 25°C	APHA 21e 4500-H <sup>+</sup> B	
Dissolved Oxygen	APHA 21e 4500-O G	
Conductivity at 25°C	APHA 21e 2510B	
Salinity	APHA 21e 2520B	
Temperature	Section 6 of international Accreditation New Z	Zealand Technical
1	Guide no. 3 Second edition March 2008: Work	king Thermometer Calibration Procedure.

#### PART D - CALIBRATION RESULTS<sup>(b,c)</sup>

#### pH at 25°C

Target (pH unit)	Displayed Reading <sup>(d)</sup> (pH Unit)	Tolerance(e)(pH Unit)	Results
4.00	3.96	-0.04	Satisfactory
7.42	7.37	-0.05	Satisfactory
10.01	10.05	+0.04	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

~ CONTINUED ON NEXT PAGE ~

#### <u>Remark(s)</u>

- <sup>(a)</sup> The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.
- (b) The results relate only to the calibrated equipment as received
- (e) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- (d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- (e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

APPROVED SIGNATORY :

FUNG Yuen-ching Aries Laboratory Manager



Test Report No.	AF120113
Date of Issue	20 December, 2016
Page No.	2 of 2

#### PART D - RESULT (Cont'd)

#### Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16.0	15.6	-0.4	Satisfactory
21.0	20.4	-0.6	Satisfactory
34.5	34.0	-0.5	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

#### **Dissolved Oxygen**

Reading of Ref. DO (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.15	0.19	+0.04	Satisfactory
3.43	3.49	+0.06	Satisfactory
8.60	8.70	+0.10	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (mg/L)

#### Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
146.9	142.5	-3.0	Satisfactory
1412	1387	-1.8	Satisfactory
12890	12804	-0.7	Satisfactory
58670	57964	-1.2	Satisfactory
111900	110282	-1.4	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.8	Satisfactory
20	20.14	+0.7	Satisfactory
30	30.26	+0.9	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~



專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

### **Report of Equipment Performance Check/Calibration**

Test Report No.	:	AF090104
Date of Issue	:	27 Sep, 2016
Page No.	:	1 of 2

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Rm 811, Hin Pui House, Hin Keng Estate, Tai Wai New Territories, Hong Kong Attn: Mr. Thomas WONG

#### **PART B – DESCRIPTION**

Name of Equipment	:	YSI Professional Plus (Pro Plus) Multiparameter with sensor probe
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	IOD 101566
Client's Reference Number	:	
Date of Received	:	19 Sep, 2016
Date of Calibration	1	19 Sep, 2016
Date of Next Calibration(a)	:	19 Dec, 2016

#### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Reference Method
APHA 21e 4500-H <sup>+</sup> B
APHA 21e 4500-O G
APHA 21e 2510B
APHA 21e 2520B
Section 6 of international Accreditation New Zealand Technical
Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

#### PART D - CALIBRATION RESULTS<sup>(b,c)</sup>

#### pH at 25°C

Target (pH unit)	Displayed Reading <sup>(d)</sup> (pH Unit)	Tolerance <sup>(e)</sup> (pH Unit)	Results
4.00	4.05	+0.05	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

#### Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
33.0	33.3	+0.3	Satisfactory
26.0	25.8	-0.2	Satisfactory
12.0	11.6	-0.4	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

<sup>(d)</sup> "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

APPROVED SIGNATORY :

YIU Sok-fong, Marble Laboratory Manager

<sup>(</sup>a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

<sup>(</sup>b) The results relate only to the calibrated equipment as received

<sup>(</sup>c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

<sup>(</sup>e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.



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Date of Issue	:	27 Sep, 2016
Page No.	:	2 of 2

#### PART D - RESULT (Con't)

#### **Dissolved Oxygen**

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results	
8.54	8.62	+0.08	Satisfactory	
5.30	5.24	-0.06	Satisfactory	
3.40	3.35	-0.05	Satisfactory	

Tolerance limit of dissolved oxygen should be less than ±0.20 (mg/L)

#### Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results	
146.9	144.5	-1.6	Satisfactory	
1412	1386	-1.8	Satisfactory	
12890	12655	-1.8	Satisfactory	

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
0	0.00		Satisfactory
10	10.19	+1.9	Satisfactory
20	20.03	+0.2	Satisfactory
30	29.97	-0.1	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~



Test Report No.: AF090105Date of Issue: 27 Sep, 2016Page No.: 1 of 1

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Rm 811, Hin Pui House, Hin Keng Estate, Tai Wai New Territories, Hong Kong Attn: Mr. Thomas Wong

#### **PART B – SAMPLE INFORMATION**

Description of Samples	:	HACH 2100Q Protable Turbidimeter
Brand Name	:	HACH
Model Number	:	2100Q
Serial Number	:	13120C029845
Equipment Number	:	
Date of Received	:	19 Sep, 2016
Date of Calibration	:	19 Sep, 2016
Date of Next Calibration(a)	:	19 Dec, 2016

#### PART C - CALIBRATION REQUESTED

Parameter	<b>Reference Method</b>
Turbidity	APHA 21e 2130 B

#### PART D - RESULT<sup>(bc)</sup>

#### Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(d)</sup> (NTU)	Tolerance <sup>(e)</sup> (%)	Results
0	0.00		Satisfactory
4	3,91	-2.2	Satisfactory
20	19.9	-0.5	Satisfactory
100	97.5	-2.5	Satisfactory
800	808	+1.0	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~

APPROVED SIGNATORY :

YIU Sok-fong, Marble Laboratory Manager

<sup>&</sup>lt;sup>(a)</sup> The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

<sup>(</sup>b) The results relate only to the tested sample as received

<sup>(\*)</sup> the performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

<sup>(</sup>d) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

<sup>(</sup>e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.



Test Report No.:AF120114aDate of Issue:04 January, 2017Page No.:1 of 1

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Rm 811, Hin Pui House, Hin Keng Estate, Tai Wai New Territories, Hong Kong Attn: Mr. Thomas Wong

#### **PART B – SAMPLE INFORMATION**

Description of Samples	:	HACH 2100Q Protable Turbidimeter
Brand Name	:	HACH
Model Number	:	2100Q
Serial Number	:	13120C029845
Equipment Number	:	
Date of Received	:	16 Dec, 2016
Date of Calibration	:	16 Dec, 2016
Date of Next Calibration(a)	:	16 Mar, 2017

#### PART C - CALIBRATION REQUESTED

Parameter	Reference Method	
Turbidity	APHA 21e 2130 B	

#### PART D - RESULT<sup>(bc)</sup>

#### Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(d)</sup> (NTU)	Tolerance <sup>(e)</sup> (%)	Results
0	0.00		Satisfactory
4	4.12	+3.0	Satisfactory
20	20.9	+4.5	Satisfactory
100	105	+5.0	Satisfactory
800	817	+2.1	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~

#### This report supersedes the previous report no. AF120114 dated 20 December 2016.

#### <u>Remark(s)</u>

(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

<sup>(b)</sup> The results relate only to the tested sample as received

(e) the performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

(d) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.
 (e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

APPROVED SIGNATORY :

FUNG Yuen-ching Aries Laboratory Manager



Hong Kong Calibration Ltd. 香港校正有限公司

## **Calibration Certificate**

Certificate No.	608737		Page	1 of 3 Pages
Customer :	Enovative Environmental Serv	ice Limited		
Address :	Flat 6, 3/F, Block E, Wah Lok	Industrial Centre, 31-	35 Shan Mei Stre	eet, Shatin, N.T., Hong Kong.
Order No. :	Q63459		Date of receipt	t : 22-Sep-16
Item Tested				
Description :	Sound Level Meter			
Manufacturer :	B&K		I.D.	:
Model :	2238		Serial No.	: 2694908
Test Conditi	ons			
Date of Test :	3-Oct-16		Supply Voltag	e :
Ambient Temp	erature : (23 ± 3)°C			dity: (50 ± 25) %
Test Specifi	cations			
Calibration chec Ref. Document/	ck. /Procedure: Z01, IEC 651 and	IEC 804.		
Test Results	5			
	within the IEC 651 Type1 and I shown in the attached page(s).		ication.	
Main Test equip	oment used:			
Equipment No.	Description	Cert. No.		Traceable to
S017	Multi-Function Generator	C147450		SCL-HKSAR
S240	Sound Level Calibrator	601604		NIM-PRC & SCL-HKSAR
will not include allow	this Calibration Certificate only relate wance for the equipment long term drift andling, or the capability of any other la	t, variations with environme	ental changes, vibrati	on and shock during transportation

for any loss or damage resulting from the use of the equipment. The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant.

The test results apply to the above Unit-Under-Test only				
Calibrated by :	Appro	ved by :	Alan Chu	-
This Certificate is issued by: Hong Kong Calibration Ltd. Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chu Tel: 2425 8801 Fax: 2425 8646	Date:	3-Oct-16		

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## **Calibration Certificate**

Certificate No. 608737

Page 2 of 3 Pages

Results :

#### 1. SPL Accuracy

UUT Setting		Applied Value	UUT		
Range	Freq. Wgt.	Bandwith	Center Freq.	(dB)	Reading (dB)
$20 \sim 100$	A	BB/F		94.0	94.0
	A	BB/S			94.0
	C	BB/F			94.0
$40 \sim 120$	A	BB/F		94.0	94.0
	A	BB/F		114.0	114.2

IEC 60651 Type 1 Spec. :  $\pm$  0.7 dB Uncertainty :  $\pm$  0.1 dB

Level Stability : 0.0 dB
 IEC 60651 Type 1 Spec. : ± 0.3 dB
 Uncertainty : ± 0.1 dB

#### 3. Linearity

#### 3.1 Level Linearity

UUT Range (dB)	Applied Value (dB)	UUT Reading (dB)	Variation (dB)	IEC 60651 Type 1 Spec. (Primary Indicator Range)
140	114.0	114.0	0.0	± 0.7 dB
130	104.0	104.0	0.0	
120	94.0	94.0 (Ref.)		
110	84.0	84.0	0.0	
100	74.0	74.0	0.0	
90	64.0	64.0	0.0	
80	54.0	54.0	0.0	

Uncertainty :  $\pm 0.1 \text{ dB}$ 

#### 3.2 Differential level linearity

UUT Range (dB)	Applied Value (dB)	UUT Reading (dB)	Variation (dB)	IEC 60651 Type 1 Spec.
120	84.0	84.1	+0.1	± 0.4 dB
	94.0	93.9 (Ref.)		
	95.0	95.0	0.0	± 0.2 dB

Uncertainty :  $\pm 0.1 \text{ dB}$ 



## **Calibration Certificate**

#### Certificate No. 608737

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#### 4. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 60651 Type 1 Spec.
31.5 Hz	-39.3	- 39.4 dB, ± 1.5 dB
63 Hz	-26.2	- 26.2 dB, ± 1.5 dB
125 Hz	-16.2	- 16.1 dB, ± 1 dB
250 Hz	-8.7	- $8.6  dB, \pm 1  dB$
500 Hz	-3.2	$- 3.2 \text{ dB}, \pm 1 \text{ dB}$
1 kHz	0.0 (Ref)	$0 \text{ dB}, \pm 1 \text{ dB}$
2 kHz	+1.2	$+ 1.2 \text{ dB}, \pm 1 \text{ dB}$
4 kHz	+1.0	$+ 1.0 \text{ dB}, \pm 1 \text{ dB}$
8 kHz	-1.2	- 1.1 dB, + 1.5 dB ~ -3 dB
16 kHz	-6.7	- 6.6 dB, + 3 dB ~ - $\infty$

Uncertainty :  $\pm 0.1 \text{ dB}$ 

#### 5. Time Averaging

Applied Burst duty Factor	Applied Leq Value (dB)	UUT Reading (dB)	IEC 60804 Type 1 Spec			
continuous	40.0	40.0				
1/10	40.0	39.9	± 0.5 dB			
$1/10^{2}$	40.0	39.9	_			
$1/10^{3}$	40.0	39.9	± 1.0 dB			
$1/10^{4}$	40.0	39.5				

Uncertainty :  $\pm 0.1 \text{ dB}$ 

Remarks: 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1013 hPa
- 4. The UUT was adjusted with the laboratory's sound calibrator at the reference sound pressure level before the calibration.

----- END -----

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# Appendix D EM&A Monitoring Schedules

### Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 Impact Monitoring & Site Auditing Schedule for December 2016

December 2016											
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
				1	<b>2</b> Water (I5, C3a, C3b)	<b>3</b> 24-hour TSP + 3 x 1-hour TSP					
4	<b>5</b> ET Site Walk(09:30am – 11:00am) Water (I5, C3a, C3b)	6	<b>7</b> Water (I5, C3a, C3b)	8	9 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (I5, C3a, C3b)	10					
11	<b>12</b> ET Site Walk(09:30am – 11:00am) Water (I5, C3a, C3b)	13	<b>14</b> Water (I5, C3a, C3b)	<b>15</b> 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	<b>16</b> Water (I5, C3a, C3b)	17					
18	<b>19</b> Water (I5, C3a, C3b)	20	21 ET Site Walk(09:30 am – 11:00 am) with Liantang Project-wide ET and IEC + SSEMC 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (15, C3a, C3b)	22	<b>23</b> Water (I5, C3a, C3b)	<b>24</b> 24-hour TSP + 3 x 1-hour TS (SR77)					
25	26 The first weekday after Christmas Day	27 The second weekday after Christmas Day		<b>29</b> ET Site Walk(09:30am – 11:00am) with Fanling Stage 2 IEC & Liantang Project-wide ET and IEC	<b>30</b> 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (I5, C3a, C3b)	31					

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 Impact Monitoring & Site Auditing Schedule for January 2017

	January 2017												
Sun	Mon	Tue	Wed	Thu	Fri	Sat							
1	2 The day following the first day of January	<b>3</b> ET Site Walk(02:00pm – 03:30pm) Water (I5, C3a, C3b)	4	5 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (I5, C3a, C3b)	6	<b>7</b> Water (I5, C3a, C3b)							
8	<b>9</b> ET Site Walk(09:30am – 11:00am) Water (I5, C3a, C3b)	10	<b>11</b> 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (I5, C3a, C3b)	12	<b>13</b> Water (I5, C3a, C3b)	14							
15	<b>16</b> Water (I5, C3a, C3b)	<b>17</b> 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	<b>18</b> ET Site Walk(09:30 am – 11:00 am) with Liantang Project-wide ET and IEC + SSEMC (To be confirmed) Water (I5, C3a, C3b)	19	<b>20</b> Water (I5, C3a, C3b)	21							
22	23 ET Site Walk(09:30am – 11:00 am) with Fanling Stage 2 IEC & Liantang Project-wide ET and IEC (To be confirmed) 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) Water (I5, C3a, C3b)	24	<b>25</b> Water (I5, C3a, C3b)	26	<b>27</b> 24-hour TSP + 3 x 1-hour TSP Water (I5, C3a, C3b)	<b>28</b> Lunar New Year's Day							
29	<b>30</b> The third day of Lunar New Year	<b>31</b> The fourth day of Lunar New Year											



# Appendix E Meteorological Data Extracted from Hong Kong Observatory

## Daily Extract of Meteorological Observations , December 2016 -Sheung Shui

		Air	lempera	iture				0	Mean	
Day	Mean Pressure (hPa)	Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)	Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Wind Speed (km/h)	
οι	1022.5	23.8	18.1	14.9	11.9	68	0.0	•••	•••	
02	1022.7	24.3¥	18.8	15.9 <b>#</b>	14.0	75	0.0	•••	•••	
03	1021.0	22.8	20.2	17.7	15.8	76	0.0	•••	•••	
04	1018.1	26.7	21.3	17.9	18.0	83	0.0	•••	•••	
OS	1017.5	29.6	22.5	19.5	18.9	82	0.0	•••	•••	
05	1021.0	22.2	19.5	18.0	9.6	53	0.0	•••	•••	
07	1019.2	24.6¥	18.7	16.2 <b>#</b>	11.1	63	0.0	•••	•••	
08	1016.5	23.3	17.3	14.0	10.7	67	0.0	•••	•••	
09	1015.4	24.9 <b>#</b>	16.7	10.9 <b>#</b>	12.3	79	0.0	•••	•••	
10	1016.4	26.9 <b>#</b>	19.3	13.9 <b>#</b>	15.1	79	0.0	•••	•••	
ιι	1016.4	24.0	20.2	18.1	15.8	76	0.0	•••	•••	
12	1014.9	25.7 <b>#</b>	21.1	17.7 <b>#</b>	16.6	76	0.0	•••		
L3	1014.4	28.0 <b>#</b>	21.9	17.9 <b>#</b>	18.4	82	0.0	•••		
٤4	1018.6	23.4¥	19.9	16.8 <b>#</b>	12.5	63	0.0	•••		
LS	1023.2	20.4	16.4	13.1	8.6	60	0.0	•••		
l٥	1026.1	18.2	13.1	10.1	5.8	63	0.0	•••		
17	1023.5	19.0	14.2	8.2	9.3	74	0.0	•••		
18	1021.5	26.3	18.7	14.7	14.6	78	0.0	•••		
L9	1018.2	27.2	20.3	16.1	14.8	73	0.0	•••	•••	
20	1017.1	26.3¥	21.1	18.0 <b>#</b>	16.9	78	0.0	•••		
21	1016.7	22.0	20.9	19.2	20.0	94	4.5	•••		
22	1017.2	26.0	21.2	16.6	16.1	75	0.0	•••		
23	1019.3	23.5 <b>#</b>	18.5	15.8 <b>#</b>	13.1	71	0.0	•••		
24	1019.2	18.9	16.8	14.6	14.5	87	5.0	•••		
25	1018.3	20.7	19.1	17.1	16.3	84	0.0	•••	•••	
26	1016.9	26.9	20.9	18.7	17.9	84	0.0	•••	•••	
27	1021.6	19.4	15.1	10.8	7.6	62	0.0	•••		
28	1023.8	15.4	12.5	9.0	4.3	58	0.0	•••	•••	
29	1024.6	17.6	14.3	12.0	4.2	51	0.0	•••	•••	
30	1024.7	18.7	14.6	11.9	6.8	61	0.0	•••		
ЗL	1022.9	23.9	16.7	10.9	11.8	75	0.0	•••		

\*\*\* una vailable

# data incomplete

Rainfall measured in increment of 0.5 mm. Amount of  $\leq 0.5$  mm cannot be detected



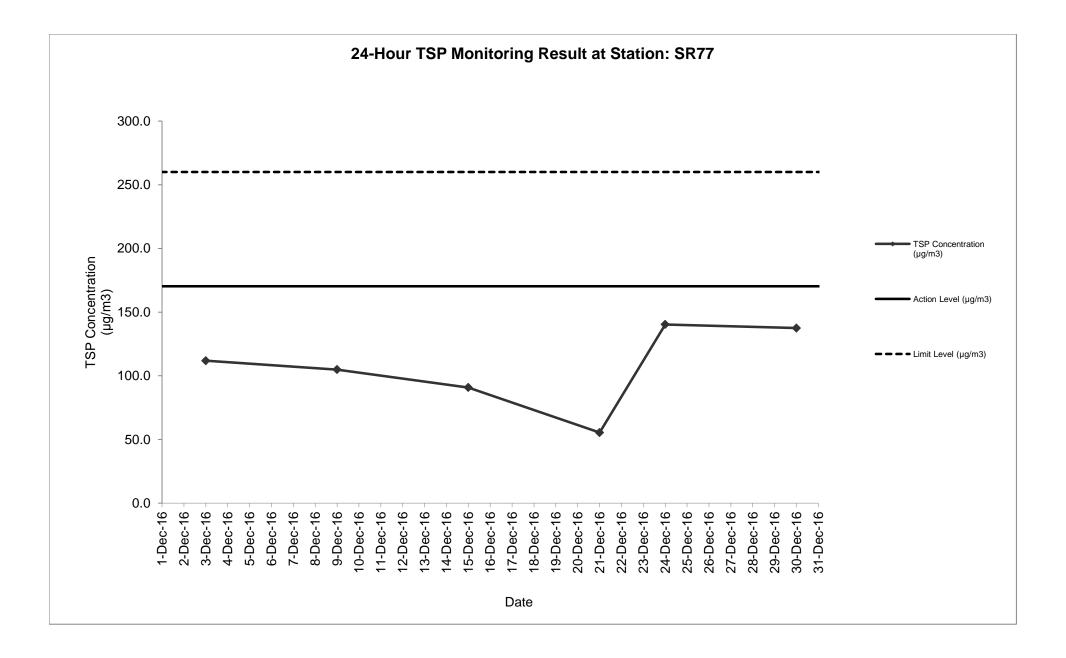
# Appendix F Air Quality Monitoring Results and their Graphical Presentation

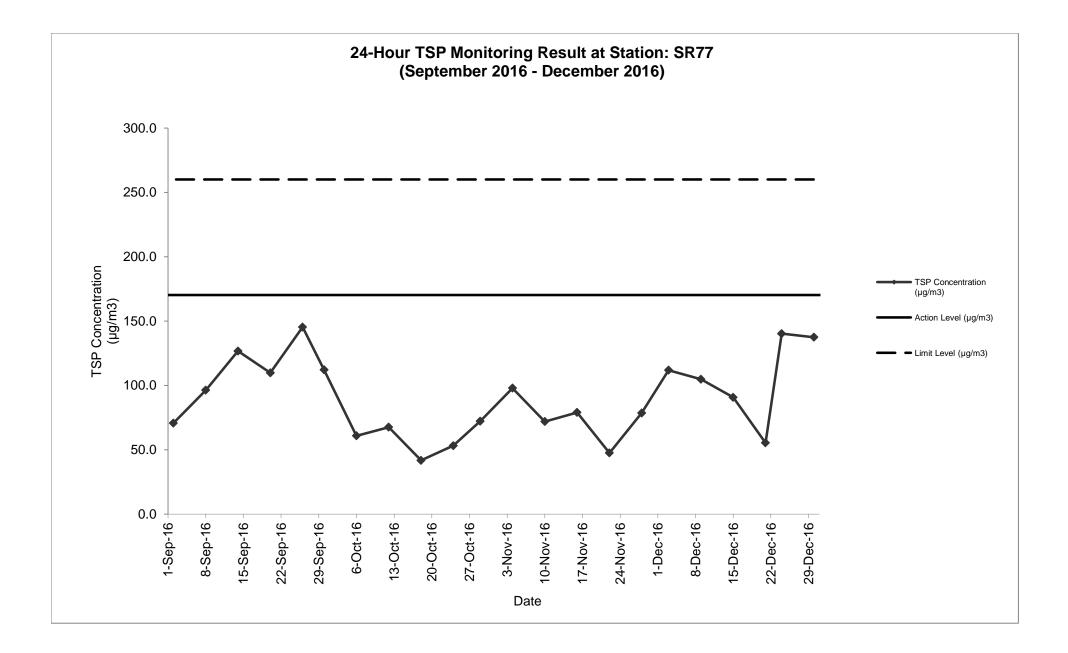
Appendix F Air Quality Monitoring Results and their Graphical Presentation

24-Hour TSP Monitoring Result at Station: SR77

		Starting Time	Paper No.	Paper No.	Paper No.	v	/t. of pape	' (g)	I	Elapse Tim	e	Fic	ow Rate (C	FM)	Flow	v Rate (m <sup>3</sup>	/min)	Total Volume	TSP Concentration	Action Level	Limit Level	Wind speed	Wind direction
Date	Condition	Time		Initial Wt.	Final Wt.	Wt. of Dust	Initial	Final	Sampling Hour	Initial	Final	Avg Flow Rate	Initial	Final	Avg Flow Rate	(m³)	(µg/m³)	(µg/m3)	(µg/m3)	m/s	unection		
3-Dec-16	Sunny	12:11	260	2.8577	3.0903	0.2326	5683.67	5707.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	111.8	170.3	260.0	<5	N		
9-Dec-16	Fine	12:10	262	2.8545	3.0725	0.2180	5710.67	5734.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	104.8	170.3	260.0	<5	N		
15-Dec-16	Sunny	12:09	264	2.8553	3.0441	0.1888	5737.67	5761.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	90.8	170.3	260.0	<5	N		
21-Dec-16	Cloudy	12:09	266	2.8910	3.0062	0.1152	5764.67	5788.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	55.4	170.3	260.0	<5	N		
24-Dec-16	Cloudy	12:10	268	2.8801	3.1718	0.2917	5791.67	5815.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	140.3	170.3	260.0	<5	N		
30-Dec-16	Cloudy	12:11	270	2.8749	3.1608	0.2859	5818.67	5842.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	137.5	170.3	260.0	<5	N		
																Average	106.8						
									Min	55.4													
										Max	140.3												

Note: No major dust source observed during the monitoring period



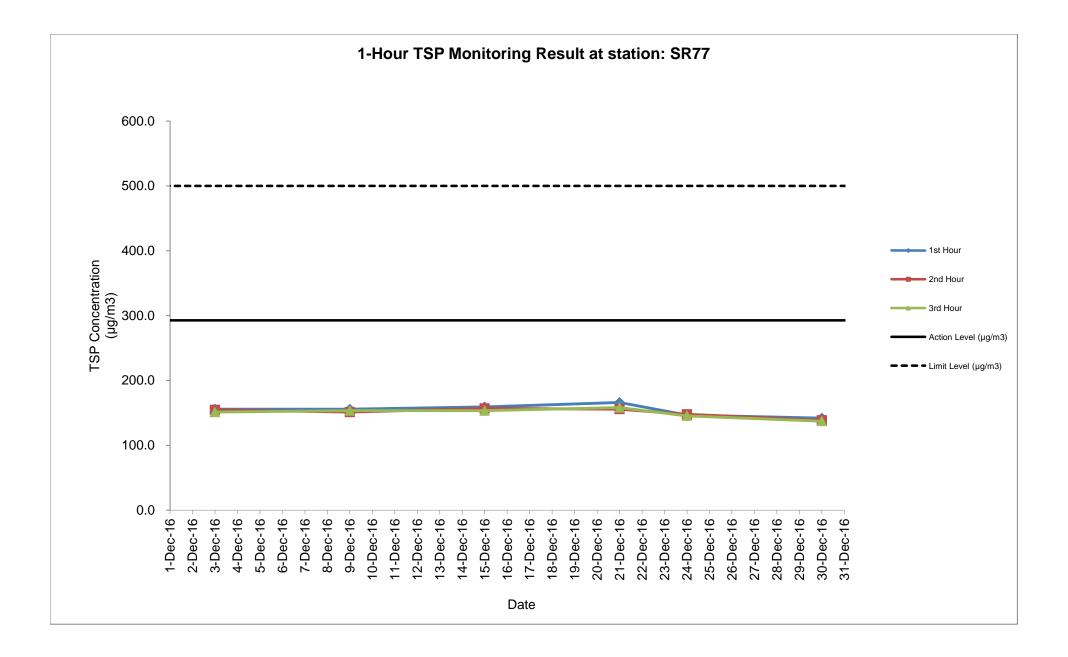


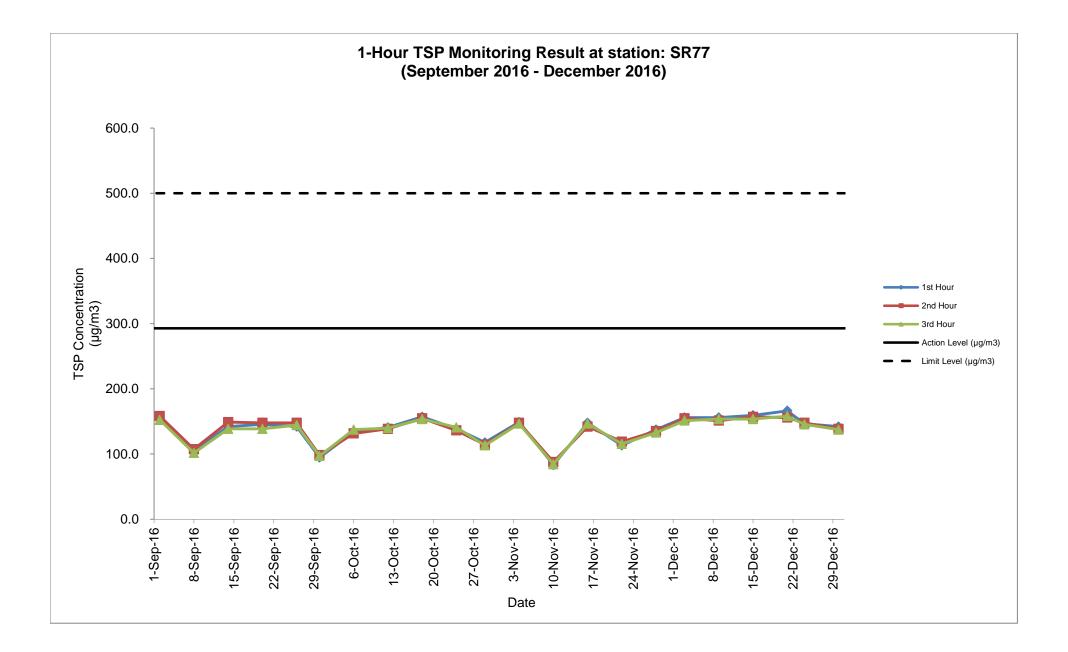
#### Detailed Calculation of 1-Hour TSP Monitoring Result at Station: SR77

Sampling	Weather	Starting Time	Paper No.		/t. of paper	' (g)	I	Elapse Time		Elapse Time		Elapse Time		Elapse Time		Elapse Time		Elapse Time		Elapse Time		Elapse Time Flow Rate (CFM) Flow Rate (r		Flow Rate (CFM)		Flow Rate (m <sup>3</sup> /min)		Flow Rate (m <sup>3</sup> /min)		TSP Concentration	Action Level	Limit Level	Wind speed	Wind
Date	Condition	Time	-	Initial Wt.	Final Wt.	Wt. of Dust	Initial	Final	Sampling Hour	Initial	Final	Avg Flow Rate	Initial	Final	Avg Flow Rate	(m³)	(µg/m³)	(µg/m3)		m/s	direction													
3-Dec-16	Sunny	09:00	259A	2.8647	2.8782	0.0135	5680.67	5681.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	155.8	292.7	500.0	<5	N													
	Sunny	10:03	259B	2.8694	2.8828	0.0134	5681.67	5682.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	154.6	292.7	500.0	<5	N													
	Sunny	11:07	259C	2.8703	2.8834	0.0131	5682.67	5683.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	151.2	292.7	500.0	<5	N													
9-Dec-16	Fine	09:00	261A	2.8701	2.8836	0.0135	5707.67	5708.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	155.8	292.7	500.0	<5	N													
	Fine	10:03	261B	2.8692	2.8823	0.0131	5708.67	5709.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	151.2	292.7	500.0	<5	N													
	Fine	11:06	261C	2.8656	2.8789	0.0133	5709.67	5710.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	153.5	292.7	500.0	<5	N													
15-Dec-16	Sunny	09:00	263A	2.8660	2.8798	0.0138	5734.67	5735.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	159.3	292.7	500.0	<5	N													
	Sunny	10:03	263B	2.8541	2.8677	0.0136	5735.67	5736.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	157.0	292.7	500.0	<5	N													
	Sunny	11:07	263C	2.8628	2.8761	0.0133	5736.67	5737.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	153.5	292.7	500.0	<5	N													
21-Dec-16	Cloudy	09:00	265A	2.8505	2.8649	0.0144	5761.67	5762.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	166.2	292.7	500.0	<5	N													
	Cloudy	10:02	265B	2.8611	2.8746	0.0135	5762.67	5763.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	155.8	292.7	500.0	<5	N													
	Cloudy	11:05	265C	2.8473	2.8610	0.0137	5763.67	5764.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	158.1	292.7	500.0	<5	N													
24-Dec-16	Cloudy	09:00	267A	2.9052	2.9179	0.0127	5788.67	5789.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	146.6	292.7	500.0	<5	N													
	Cloudy	10:03	267B	2.8771	2.8899	0.0128	5789.67	5790.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	147.7	292.7	500.0	<5	N													
	Cloudy	11:07	267C	2.8891	2.9017	0.0126	5790.67	5791.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	145.4	292.7	500.0	<5	N													
30-Dec-16	Cloudy	09:00	269A	2.8598	2.8721	0.0123	5815.67	5816.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	142.0	292.7	500.0	<5	N													
	Cloudy	10:03	269B	2.8651	2.8771	0.0120	5816.67	5817.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	138.5	292.7	500.0	<5	N													
	Cloudy	11:08	269C	2.8771	2.889	0.0119	5817.67	5818.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	137.3	292.7	500.0	<5	N													
																Average	151.6																	

Average	151.0
Min	137.3
Max	166.2

Note: No major dust source observed during the monitoring period Data in **Bold** denotes exceedance of respective Action Level Data in **Bold Underline** denotes exceedance of respective Limit Level







# Appendix G Summary of Event and Action Plan



#### Event and Action Plan for Air Quality

Event	Action			
	ET Leader	IEC	ER	Contractor
Action level being exceeded by one sampling day	<ol> <li>Identify source;</li> <li>Inform IEC and ER;</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> </ol>	1. Notify Contractor.	1. Rectify any unacceptable practice;
Sampling day	<ol> <li>Repeat measurement to confirm finding;</li> </ol>	2. Check Contractor's working method.		2. Amend working methods if appropriate.
	<ol> <li>Increase monitoring frequency to daily.</li> </ol>			
Action level being	1. Identify source;	1. Check monitoring data submitted	1. Confirm receipt of notification of	1. Submit proposals for remedial
exceeded by two or more consecutive	2. Inform IEC and ER;	by ET;	failure in writing;	actions to IEC within 3 working
sampling days	<ol> <li>Repeat measurements to confirm findings;</li> </ol>	<ol> <li>Check Contractor's working method;</li> </ol>	<ol> <li>Notify Contractor;</li> <li>Ensure remedial measures</li> </ol>	<ul><li>days of notification;</li><li>2. Implement the agreed proposals;</li></ul>
	<ol> <li>Increase monitoring frequency to daily;</li> </ol>	<ol> <li>Discuss with ET and Contractor on possible remedial measures;</li> </ol>	properly implemented.	3. Amend proposal if appropriate.
	<ol> <li>Discuss with IEC and Contractor on remedial actions required;</li> </ol>	<ol> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> </ol>		
	<ol> <li>If exceedance continues, arrange meeting with IEC and ER;</li> </ol>	<ol> <li>Supervise Implementation of remedial measures.</li> </ol>		
	<ol> <li>If exceedance stops, cease additional monitoring.</li> </ol>			

Event	Action			
	ET Leader	IEC	ER	Contractor
Limit level being exceeded by one sampling day	<ol> <li>Identify source;</li> <li>Inform IEC, ER, Contractor and EPD;</li> <li>Repeat measurement to confirm</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of netification;</li> </ol>
	<ul> <li>finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ul>	<ol> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol>	properly implemented.	<ul><li>days of notification;</li><li>3. Implement the agreed proposals;</li><li>4. Amend proposal if appropriate.</li></ul>
Limit level being exceeded by two or more consecutive sampling days	<ol> <li>Notify IEC, ER, Contractor, and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase frequency to daily;</li> <li>Analyse Contractor's working procedures to determine possible mitigation to be;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discus amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by ER until the exceedance is abated.</li> </ol>

#### Event and Action Plan for Noise

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level	<ol> <li>Notify IEC and the Contractor.</li> <li>Carry out investigation.</li> </ol>	1. Review with analysed results submitted by ET.	1. Confirm receipt of notification of failure in writing.	1. Submit noise mitigation proposals to IEC.
	<ol> <li>Carry out investigation.</li> <li>Report the results of investigation to IEC and the Contractor.</li> <li>Discuss with the Contractor and formulate remedial measures.</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol> <li>Review the proposed remedial measures by the Contractor and advise ER accordingly.</li> <li>Supervise the implement of remedial measures.</li> </ol>	<ol> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	2. Implement noise mitigation proposals.
Limit Level	<ol> <li>Notify IEC, ER, EPD and the Contractor.</li> <li>Identify the source.</li> <li>Repeat measurement to confirm findings.</li> <li>Increase monitoring frequency.</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Inform IEC, ER, and EPD the causes &amp; actions taken for the exceedances.</li> <li>Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> <li>If exceedance stops, cease</li> </ol>	<ol> <li>Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.</li> <li>Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly.</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>Ensure remedial measures are properly implemented.</li> <li>If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance.</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the agreed proposals.</li> <li>Resubmit proposals if problem still not under control.</li> <li>Stop the relevant activity of works as determined by the ER until the exceedance is abated.</li> </ol>



#### Event and Action Plan for Water Quality

Event	Action											
	ET Leader	IEC	ER	Contractor								
Action level being exceeded by one sampling day	<ol> <li>Repeat in-situ measurement on next day of exceedance to confirm findings;</li> </ol>		1. Confirm receipt of notification of failure in writing; Notify, Contractor	<ol> <li>Inform the ER &amp; confirm notification of the non-compliance in writing;</li> </ol>								
	2. Identify source(s) of impact;			2. Rectify unacceptable practice;								
	3. Inform IEC, Contractor & ER;			3. Amend working methods if								
	<ol> <li>Check monitoring data, all plant, equipment &amp; contractor's working methods;</li> </ol>			appropriate.								
Action level being exceeded by two or more consecutive sampling days	<ol> <li>Repeat measurement on next day of exceedance to confirm findings;</li> </ol>	<ol> <li>Checking monitoring data submitted by ET &amp; Contractor's working method;</li> </ol>	<ol> <li>Discuss with IEC on the proposed mitigation measures;</li> <li>Ensure mitigation measures</li> </ol>	<ol> <li>Inform the Engineer &amp; confirm notification of the non-compliance in writing;</li> </ol>								
sampling days	<ol><li>Identify source(s) of impact;</li></ol>	2. Discuss with ET & Contractor on	properly implemented;	2. Rectify unacceptable practice;								
	3. Inform IEC, Contractor, ER & EPD;	3. Review the proposed mitigation	3. Assess the effectiveness of the implemented mitigation	3. Check all plant & equipment & consider changes of working								
	<ol> <li>Check monitoring data, all plant, equipment &amp; Contractor's working methods;</li> </ol>	accordingly;	measures.	<ul> <li>methods;</li> <li>4. Submit proposal of mitigation measures to ER within 3 working down of patitionation 2 discuss with</li> </ul>								
	5. Discuss mitigation measures with IEC, ER & Contractor;	4. Supervise the implementation of mitigation measures.		days of notification & discuss with ET, IEC & ER;								
	<ol> <li>Ensure mitigation measures are implemented;</li> </ol>			<ol> <li>Implement the agreed mitigation measures.</li> </ol>								
	<ol> <li>Increase monitoring to daily until no exceedance of Action level.</li> </ol>											

Event	Action					
	ET Leader	IEC	ER	Contractor		
Limit level being exceeded by one sampling day	<ol> <li>Repeat measurement on next day of exceedance to confirm findings;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, contractor, ER &amp; EPD;</li> <li>Check monitoring data, all plant, equipment &amp; contractor's working methods;</li> <li>Discuss mitigation measures with IEC, Contractor &amp; ER.</li> </ol>	<ol> <li>Checking monitoring data submitted by ET &amp; Contractor's working method;</li> <li>Discuss with ET &amp; Contractor on the possible mitigation measures;</li> <li>Review the proposed mitigation measures submitted by Contractor &amp; advise the ER accordingly.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Discuss with IEC, ET &amp; Contractor on the proposed mitigation measures;</li> <li>Request Contractor to review the working methods.</li> </ol>	<ol> <li>Inform the ER &amp; confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant &amp; equipment &amp; consider changes of working methods;</li> <li>Submit proposal of mitigation measures to ER within 3 working days of notification &amp; discuss with ET, IEC &amp; ER.</li> </ol>		
Limit level being exceeded by two or more consecutive sampling days	<ol> <li>Repeat measurement on the next day of exceedance to confirm findings;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, Contractor, ER &amp; EPD;</li> <li>Check monitoring data, all plant, equipment &amp; Contractor's working methods;</li> <li>Discuss mitigation measures within IEC, Contractor &amp; ER;</li> <li>Ensure mitigation measures are implemented;</li> <li>Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.</li> </ol>	<ol> <li>Checking monitoring data submitted by ET &amp; Contractor's working method;</li> <li>Discuss with ET &amp; Contractor on potential remedial actions;</li> <li>Review Contractor's mitigation measures whenever necessary to assure their effectiveness &amp; advise the ER accordingly;</li> <li>Supervise the implementation of mitigation measures.</li> </ol>	review the working methods;	<ul> <li>measures;</li> <li>4. Resubmit proposals of mitigation measures if problem still not under control;</li> </ul>		



# Appendix H Noise Monitoring Results and their Graphical Presentation

#### Appendix H Noise Monitoring Results and their Graphical Presentation

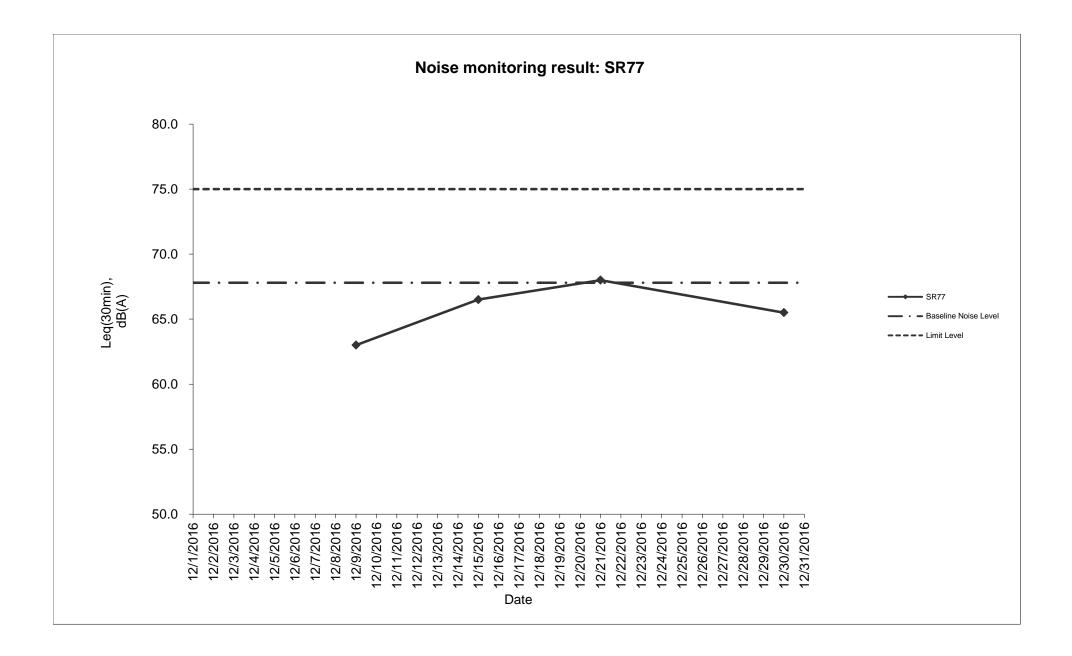
Noise Monitoring Result at SR77

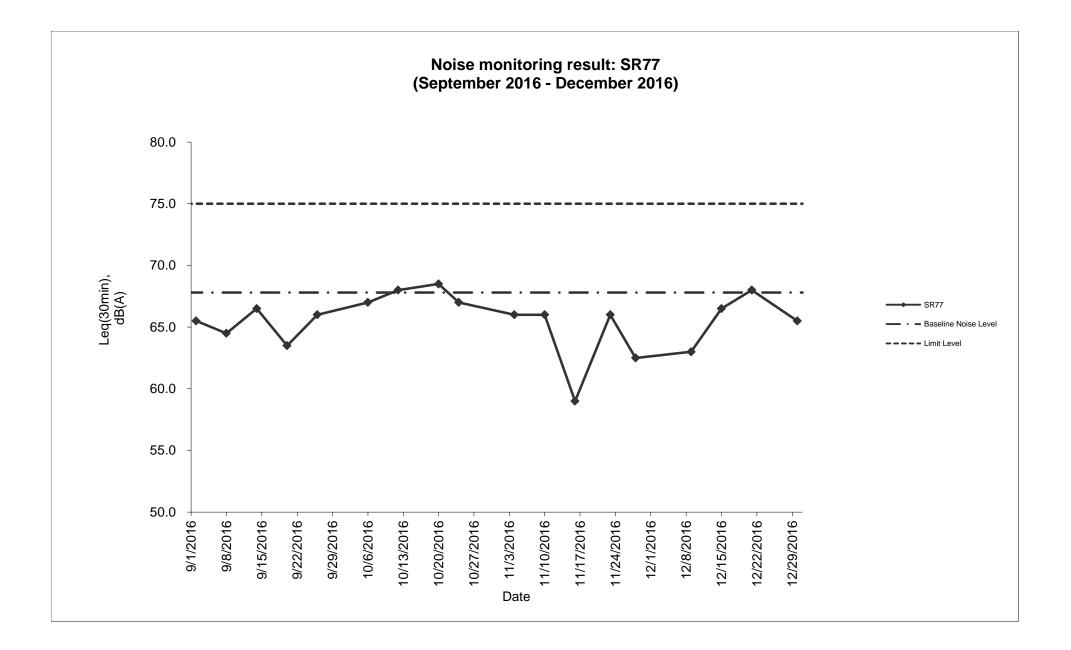
Date	Weather	Start	End	Measured Noise Level (dB(A))*			Baseline Corrected	Baseline Noise Level	Limit Level	Exceedance
	Condition	Time	Time	L10(30min)	L90(30min)	Leq(30min)	Level, dB(A)**	(dB(A)), Leq(30min)	dB(A)	(Y / N)
2016/12/09	Fine	11:30	12:00	89.0	56.0	63.0	-	67.8	75.0	N
2016/12/15	Sunny	11:30	12:00	95.0	57.0	66.5	-	67.8	75.0	N
2016/12/21	Cloudy	11:30	12:00	86.0	65.0	68.0	-	67.8	75.0	N
2016/12/30	Cloudy	11:30	12:00	90.0	60.5	65.5	-	67.8	75.0	N
					Average	65.8				
					Minimum	63.0				
					Maximum	68.0				

#### Remarks

\* +3dB(A) Façade effect correction included

\*\* Baseline corrected level is only calculated when measured noise level (Leq) > limit level.







# Appendix I Laboratory Results for Water Quality



Rm. 510 & 611-612, Hong Leong Plaza, 33 Lok Yip Rd., Fanling, N.T., H.K. Tel: (852) 2676 2983 Fax: (852) 2676 2860 e-mail: <u>ell@envirolabs.com.hk</u> website: <u>http://www.envirolabs.com.hk</u>

### **TEST REPORT**

JOB NO.	:	N16120043-1				
DATE OF ISSUE	:	06 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.			
Sampling	:	Conducted by the customer.			
Sampling Date <sup>a</sup>		02 Dec 2016			
Received Date	:	02 Dec 2016			
Testing Period	:	02 Dec 2016 to 06 Dec 2016			

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 2/12/2016	001	Total Suspended Solids	5.5	mg/L

--- END OF REPORT ---

APPROVED SIGNATORY:

Q

<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120043-2			··· ··· ··· · ·	
DATE OF ISSUE	:	06 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		02 Dec 2016
Received Date	:	02 Dec 2016
Testing Period	:	02 Dec 2016 to 06 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-2 2/12/2016	002	Total Suspended Solids	7.6	mg/L

--- END OF REPORT ----

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	:	N16120043-3					
DATE OF I	SSUE :	06 December 20 <sup>°</sup>	16	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		02 Dec 2016
Received Date	:	02 Dec 2016
Testing Period	:	02 Dec 2016 to 06 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 2/12/2016	003	Total Suspended Solids	12	mg/L

--- END OF REPORT ----

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120043-4			
DATE OF ISSUE	:	06 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		02 Dec 2016
Received Date	:	02 Dec 2016
Testing Period	:	02 Dec 2016 to 06 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 2/12/2016	004	Total Suspended Solids	12	mg/L

---- END OF REPORT ----

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

**APPROVED SIGNATORY:** 



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### **TEST REPORT**

JOB NO.	:	N16120043-5			· · · · · ·	
DATE OF ISSUE	:	06 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description		One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		02 Dec 2016
Received Date	:	02 Dec 2016
Testing Period	:	02 Dec 2016 to 06 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 2/12/2016	005	Total Suspended Solids	8.1	mg/L

--- END OF REPORT ----

**APPROVED SIGNATORY:** 

<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	: N16120043-6			
DATE OF ISSUE	: 06 December 2016		PAGE	: Page 1 of 1
1. Customer		· '		
Enovative Environme	ntal Service Limited			
Room 811, Hin Pui Ho	ouse,			

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		02 Dec 2016
Received Date	:	02 Dec 2016
Testing Period	:	02 Dec 2016 to 06 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>o</sup>

Sample I.D. marked by the custome	r Sample No.	Parameters	Test Results	Units
LT3 C3b-2 2/12/2016	006	Total Suspended Solids	8.2	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	:	N16120065-1			
DATE OF ISSUE	:	07 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 5/12/2016	001	Total Suspended Solids	7.4	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

\* Test results relate only to the items received

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### **TEST REPORT**

JOB NO.		N16120065-2				
DATE OF ISSUE	:	07 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-2 5/12/2016	002	Total Suspended Solids	6.4	mg/L `
	· · · · · ·			

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120065-3			
DATE OF ISSUE	:	07 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 5/12/2016	003	Total Suspended Solids	11	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120065-4				
DATE OF ISSUE	:	07 December 2016	,	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 5/12/2016	004	Total Suspended Solids	11	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

PAPHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120065-5			
DATE OF ISSUE	Ξ	07 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 5/12/2016	005	Total Suspended Solids	14	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	:	N16120065-6			
DATE OF ISSUE	:	07 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		05 Dec 2016
Received Date	:	05 Dec 2016
Testing Period	:	05 Dec 2016 to 07 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>o</sup>

	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 5/12/2016	006	Total Suspended Solids	14	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.		N16120122-1				]
DATE OF ISSUE	:	09 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		07 Dec 2016
Received Date	:	07 Dec 2016
Testing Period	:	07 Dec 2016 to 09 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 7/12/2016	001	Total Suspended Solids	4.1	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.		N16120122-2			
DATE OF ISSUE	:	09 December 2016	PAGE	: Page 1 of	1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

:-	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
:	Conducted by the customer.
	07 Dec 2016
:	07 Dec 2016
:	07 Dec 2016 to 09 Dec 2016
	:

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-2 7/12/2016	002	Total Suspended Solids	3.6	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	: N16120122-3	
DATE OF ISSUE	: 09 December 2016	PAGE : Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		07 Dec 2016
Received Date	:	07 Dec 2016
Testing Period	:	07 Dec 2016 to 09 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 7/12/2016	003	Total Suspended Solids	22	mg/L

---- END OF REPORT ----

APPROVED SIGNATORY:

\* Information is provided by the customer

° Test results relate only to the items received

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.		N16120122-4			
DATE OF ISSUE	:	09 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		07 Dec 2016
Received Date	:	07 Dec 2016
Testing Period	:	07 Dec 2016 to 09 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 7/12/2016	004	Total Suspended Solids	32	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

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Kenneth, Kar-kin LAM Senior Lab. Manager



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### **TEST REPORT**

JOB NO.	:	N16120122-5			
DATE OF ISSUE	:	09 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		07 Dec 2016
Received Date	:	07 Dec 2016
Testing Period	:	07 Dec 2016 to 09 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 7/12/2016	005	Total Suspended Solids	3.6	mg/L

--- END OF REPORT ----

APPROVED SIGNATORY:

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120122-6				
DATE OF ISSUE	;	09 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	;	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		07 Dec 2016
Received Date	. :	07 Dec 2016
Testing Period	:	07 Dec 2016 to 09 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	АРНА <sup>ь</sup> 17е 2540 D	2.5 mg/L

#### 4. Test Results<sup>o</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 7/12/2016	006	Total Suspended Solids	3.6	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120172-1		
DATE OF ISSUE	:	13 December 2016	PAGE :	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 9/12/2016	001	Total Suspended Solids	2.8	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

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° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120172-2				
DATE OF ISSUE	:	13 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-2 9/12/2016	002	Total Suspended Solids	2.6	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

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### **TEST REPORT**

JOB NO.	:	N16120172-3				
DATE OF ISSUE	:	13 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

EI

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

1419-

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 9/12/2016	003	Total Suspended Solids	7.8	mg/L

--- END OF REPORT ----

APPROVED SIGNATORY:

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<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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## **TEST REPORT**

JOB NO.	:	N16120172-4			
DATE OF ISSUE	:	13 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 9/12/2016	004	Total Suspended Solids	5.6	mg/L

--- END OF REPORT ---

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	;	N16120172-5					7
DATE OF ISSUE	:	13 December 2016	PA	GE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 9/12/2016	005	Total Suspended Solids	2.9	mg/L

--- END OF REPORT ---

**APPROVED SIGNATORY:** 

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<sup>&</sup>lt;sup>a</sup> Information is provided by the customer <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>&</sup>lt;sup>c</sup> Test results relate only to the items received



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## **TEST REPORT**

JOB NO.	:	N16120172-6	n		
DATE OF ISSUE	:	13 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		09 Dec 2016
Received Date	:	09 Dec 2016
Testing Period	:	09 Dec 2016 to 13 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 9/12/2016	006	Total Suspended Solids	2.8	mg/L

--- END OF REPORT ---

APPROVED SIGNATORY:

<sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received

Kenneth, Kar-kin LAM Senior Lab. Manager



Rm. 510 & 611-612, Hong Leong Plaza, 33 Lok Yip Rd., Fanling, N.T., H.K. Tel: (852) 2676 2983 Fax: (852) 2676 2860 e-mail: <u>ell@envirolabs.com.hk</u> website: <u>http://www.envirolabs.com.hk</u>

### **TEST REPORT**

JOB NO.		N16120214-1	 			]
DATE OF ISSUE	:	14 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016
Testing Period	. :	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>◦</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 12/12/2016	001	Total Suspended Solids	3.8	mg/L

---- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup>APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

**APPROVED SIGNATORY:** 



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## **TEST REPORT**

JOB NO.	: N161	20214-2			
DATE OF ISSUE	: 14 De	cember 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016
Testing Period	:	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-2 12/12/2016	002	Total Suspended Solids	3.7	mg/L

--- END OF REPORT ---

APPROVED SIGNATORY:

Kenneth, Kar-kin LAM

<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	: N1	6120214-3	ngan ngan			]
DATE OF ISSUE	: 14	December 2016	PAGE	:	Page 1 of 1	ĺ

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016
Testing Period	;	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 12/12/2016	003	Total Suspended Solids	16	mg/L

--- END OF REPORT ---

° Test results relate only to the items received

**APPROVED SIGNATORY:** 

<sup>&</sup>lt;sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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## **TEST REPORT**

JOB NO.	:	N16120214-4					
DATE OF ISSUE	:	14 December 2016	•	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016

Testing Period	:	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 12/12/2016	004	Total Suspended Solids	16	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120214-5	 			
DATE OF ISSUE	:	14 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016
Testing Period	:	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 12/12/2016	005	Total Suspended Solids	5.3	mg/L

--- END OF REPORT ---

<sup>6</sup> Test results relate only to the items received

APPROVED SIGNATORY:

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<sup>&</sup>lt;sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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## **TEST REPORT**

JOB NO.	:	N16120214-6				
DATE OF ISSUE	;	14 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		12 Dec 2016
Received Date	:	12 Dec 2016
Testing Period	:	12 Dec 2016 to 14 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 12/12/2016	006	Total Suspended Solids	5.8	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	÷	N16120268-1	· <u></u>	_	,	
DATE OF ISSUE	:	16 December 2016		PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description:One batch(es) of water samples said to be discharge water were submitted by the<br/>customer and received at the laboratory in ambient condition.Sampling:Conducted by the customer.Sampling Date<sup>a</sup>14 Dec 2016Received Date:14 Dec 2016Testing Period:14 Dec 2016 to 16 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 14/12/2016	001	Total Suspended Solids	3.8	mg/L

--- END OF REPORT ----

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>6</sup> Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	: N16120268-2		
DATE OF ISSUE	: 16 December 2016	PAGE	: Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		14 Dec 2016
Received Date	:	14 Dec 2016

Testing Period : 14 Dec 2016 to 16 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>o</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-2 14/12/2016	002	Total Suspended Solids	3.6	mg/L
		· · · · · · · · · · · · · · · · · · ·		

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	: N16120268-3	
DATE OF ISSUE	: 16 December 2016	PAGE : Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Altn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		14 Dec 2016
Received Date	:	14 Dec 2016
Testing Period	:	14 Dec 2016 to 16 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 14/12/2016	003	Total Suspended Solids	18	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>e</sup> Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120268-4					
DATE OF ISSUE	÷	16 December 2016		PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		14 Dec 2016
Received Date	:	14 Dec 2016
Testing Period	:	14 Dec 2016 to 16 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 14/12/2016	004	Total Suspended Solids	18	mg/L

--- END OF REPORT ---

" Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	: N161202	68-5			· _ · ·
DATE OF ISSUE	: 16 Decen	nber 2016	PAGE	: Page 3	1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		14 Dec 2016
Received Date	:	14 Dec 2016
Testing Period	:	14 Dec 2016 to 16 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 14/12/2016	005	Total Suspended Solids	6.0	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

**APPROVED SIGNATORY:** 



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## **TEST REPORT**

JOB NO.		N16120268-6	 	 
DATE OF ISSUE	:	16 December 2016	PAGE	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.	he
Sampling	:	Conducted by the customer.	
Sampling Date <sup>a</sup>		14 Dec 2016	
Received Date	:	14 Dec 2016	
Testing Period	:	14 Dec 2016 to 16 Dec 2016	

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 14/12/2016	006	Total Suspended Solids	6.0	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	:	N16120324-1			
DATE OF ISSUE	:	20 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

**Enovative Environmental Service Limited** Room 811, Hin Pui House, Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016
Testing Period	:	16 Dec 2016 to 20 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 16/12/2016	001	Total Suspended Solids	6.2	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer
 <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

\* Test results relate only to the items received

**APPROVED SIGNATORY:** 



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### **TEST REPORT**

JOB NO.	: N16120324-2	
DATE OF ISSUE	: 20 December 2016	PAGE : Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016
Testing Period	:	16 Dec 2016 to 20 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-2 16/12/2016	002	Total Suspended Solids	8.4	mg/L

--- END OF REPORT ---

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120324-3	· · · · · · · · · · · · · · · · · · ·		· · · · ·
DATE OF ISSUE	:	20 December 2016	PAGE	;	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016
Testing Period	:	16 Dec 2016 to 20 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

	inple ner	T aramotoro	Test Results	Units
LT3 C3a-1 16/12/2016	003	Total Suspended Solids	5.2	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120324-4			
DATE OF ISSUE	:	20 December 2016	PAGE	;	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016
Testing Period	:	16 Dec 2016 to 20 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 16/12/2016	004	Total Suspended Solids	7.4	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

**APPROVED SIGNATORY:** 

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<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120324-5				]
DATE OF ISSUE	:	20 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

**Enovative Environmental Service Limited** Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016

**Testing Period** 16 Dec 2016 to 20 Dec 2016 :

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>o</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 16/12/2016	005	Total Suspended Solids	4.2	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

**APPROVED SIGNATORY:** 

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA <sup>c</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120324-6	 		
DATE OF ISSUE	:	20 December 2016	PAGE	•	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		16 Dec 2016
Received Date	:	16 Dec 2016
Testing Period	:	16 Dec 2016 to 20 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 16/12/2016	006	Total Suspended Solids	4.5	mg/L

--- END OF REPORT ----

APPROVED SIGNATORY:

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

% Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	:	N16120342-1			
DATE OF ISSUE	. :	21 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		19 Dec 2016
Received Date	:	19 Dec 2016
Testing Period	:	19 Dec 2016 to 21 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3  5-1 19/12/2016	001	Total Suspended Solids	4.5	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

- <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA
- ° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	: N16120342-2		
DATE OF ISSUE	: 21 December 2016	PAGE : Page 1 o	f 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		19 Dec 2016
Received Date	:	19 Dec 2016
Testing Period	:	19 Dec 2016 to 21 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-2 19/12/2016	002	Total Suspended Solids	4.8	mg/L

---- END OF REPORT ----

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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## **TEST REPORT**

JOB NO.	*	N16120342-3				
DATE OF ISSUE	;	21 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
:	Conducted by the customer.
	19 Dec 2016
:	19 Dec 2016
:	19 Dec 2016 to 21 Dec 2016
	: : :

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Únits
LT3 C3a-1 19/12/2016	003	Total Suspended Solids	10	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>e</sup> Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	: N16120342-4		
DATE OF ISSUE	: 21 December 2016	PAGE : Page 2	lof1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
:	Conducted by the customer.
	19 Dec 2016
:	19 Dec 2016
	19 Dec 2016 to 21 Dec 2016
	:

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C		2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 19/12/2016	004	Total Suspended Solids	9.7	mg/L

--- END OF REPORT ---

° Test results relate only to the items received

**APPROVED SIGNATORY:** 

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<sup>\*</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### TEST REPORT

JOB NO.	:	N16120342-5		•	
DATE OF ISSUE	:	21 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

d by the

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 19/12/2016	005	Total Suspended Solids	2.6	mg/L

--- END OF REPORT ---

\* information is provided by the customer

° Test results relate only to the items received

**APPROVED SIGNATORY:** 

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<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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## **TEST REPORT**

JOB NO.	-	N16120342-6				-
DATE OF ISSUE	:	21 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		19 Dec 2016
Received Date	:	19 Dec 2016
Testing Period	:	19 Dec 2016 to 21 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 19/12/2016	006	Total Suspended Solids	3.1	mg/L

--- END OF REPORT ----

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.		N16120407-1			1	
DATE OF ISSUE	:	23 December 2016	PAGE	:	Page 1 of 1	

### 1. Customer

**Enovative Environmental Service Limited** Room 811, Hin Pui House, Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		21 Dec 2016
Received Date	:	21 Dec 2016
Testing Period	:	21 Dec 2016 to 23 Dec 2016
-		

#### Test Methods 3.

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### Test Results<sup>c</sup> 4.

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 21/12/2016	001	Total Suspended Solids	4.8	mg/L

--- END OF REPORT ---

\* Information is provided by the customer
b APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	:	N16120407-2			
DATE OF ISSUE	:	23 December 201 <del>6</del>	PAGE	:	Page 1 of 1

#### 1. Customer

**Enovative Environmental Service Limited** Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		21 Dec 2016
Received Date	:	21 Dec 2016
Testing Period	:	21 Dec 2016 to 23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-2 21/12/2016	002	Total Suspended Solids	6.5	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer
 <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>e</sup> Test results relate only to the items received

APPROVED SIGNATORY:

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### **TEST REPORT**

JOB NO.	-	N16120407-3			
DATE OF ISSUE	:	23 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		21 Dec 2016
Received Date	:	21 Dec 2016
Testing Period	:	21 Dec 2016 to 23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 21/12/2016	003	Total Suspended Solids	11	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120407-4			
DATE OF ISSUE	:	23 December 2016 F	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		21 Dec 2016
Received Date	:	21 Dec 2016
Testing Period	:	21 Dec 2016 to 23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 21/12/2016	004	Total Suspended Solids	17	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

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### **TEST REPORT**

JOB NO.	: N16120407-5	
DATE OF ISSUE	: 23 December 2016	PAGE : Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		21 Dec 2016
Received Date	:	21 Dec 2016
Testing Period	:	21 Dec 2016 to 23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 21/12/2016	005	Total Suspended Solids	4.3	mg/L

--- END OF REPORT ---

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>a</sup> Information is provided by the customer

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120407-6			
DATE OF ISSUE	:	23 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description:One batch(es) of water samples said to be discharge water were submitted by the<br/>customer and received at the laboratory in ambient condition.Sampling:Conducted by the customer.Sampling Date<sup>a</sup>21 Dec 2016Received Date:21 Dec 2016Testing Period:21 Dec 2016 to 23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 21/12/2016	006	Total Suspended Solids	4.1	mg/L

---- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120450-1				
DATE OF ISSUE	:	29 December 2016	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		23 Dec 2016
Received Date	:	23 Dec 2016
Testing Period	:	23 Dec 2016 to 29 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample i.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 15-1 23/12/2016	001	Total Suspended Solids	5.3	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120450-2			
DATE OF ISSUE	:	29 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

#### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		23 Dec 2016
Received Date	:	23 Dec 2016
Testing Period	:	23 Dec 2016 to 29 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-2 23/12/2016	002	Total Suspended Solids	5.3	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120450-3				
DATE OF ISSUE	:	29 December 2016	PAGE	:	Page 1 of 1	

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		23 Dec 2016
Received Date	:	23 Dec 2016
Testing Period	:	23 Dec 2016 to 29 Dec 2016
Received Date	:	23 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 23/12/2016	003	Total Suspended Solids	15	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

- <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA
- ° Test results relate only to the items received

APPROVED SIGNATORY:

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### **TEST REPORT**

JOB NO.	:	N16120450-4	·			
DATE OF ISSUE	:	29 December 2016		PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
:	Conducted by the customer.
	23 Dec 2016
:	23 Dec 2016
:	23 Dec 2016 to 29 Dec 2016
	::

### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 23/12/2016	004	Total Suspended Solids	15	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

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<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120450-5	·····				
DATE OF ISSUE	:	29 December 2016	-	PAGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		23 Dec 2016
Received Date	:	23 Dec 2016
Testing Period	:	23 Dec 2016 to 29 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 23/12/2016	005	Total Suspended Solids	6.6	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

**APPROVED SIGNATORY:** 

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<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120450-6	 			
DATE OF ISSUE	:	29 December 2016	PAGE	:	Page 1 of 1	

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		23 Dec 2016
Received Date	4	23 Dec 2016
Testing Period	:	23 Dec 2016 to 29 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

· · · · · · · · ·	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 23/12/2016	006	Total Suspended Solids	6.7	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	;	N16120496-1		)			
DATE OF ISSUE	:	30 December 2016	×د.		PAGE	:	Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 I5-1 28/12/2016	001	Total Suspended Solids	5.3	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU Assistant Lab. Manager



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### **TEST REPORT**

JOB NO.	:	N16120496-2			
DATE OF ISSUE	:	30 December 2016	PAGE	:	Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	;	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters		Units
LT3 15-2 28/12/2016	002	Total Suspended Solids	4.1	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

- <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA
- ° Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU Assistant Lab. Manager



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### **TEST REPORT**

JOB NO.		N16120496-3	anna an ann an an ann an an ann an an an				]
DATE OF ISSUE	:	30 December 2016	PA	AGE	:	Page 1 of 1	

#### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results°

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 28/12/2016	003	Total Suspended Solids	9.0	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU

Assistant Lab. Manager

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



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### **TEST REPORT**

JOB NO.	:	N16120496-4	· · · · · · · · · · · · · · · · · · ·		
DATE OF ISSUE	:	30 December 2016	PAGE	:	Page 1 of 1

#### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

#### 3. Test Methods

Parameters		Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 28/12/2016	004	Iotal Suspended Solids	8.1	mg/L

--- END OF REPORT ----

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU

John Chi-wai YAU Assistant Lab. Manager



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### **TEST REPORT**

JOB NO.	: N16120496-5		
DATE OF ISSUE	: 30 December 2016	PAGE	: Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results<sup>c</sup>

		ters Test Resu	lts Units
LT3 C3b-1 28/12/2016 00	5 Total Suspend	ed Solids 5.8	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU Assistant Lab. Manager

## ENVIRO LABS LID.

## **ENVIRO LABS LIMITED**

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### **TEST REPORT**

JOB NO.		N16120496-6	·····			
DATE OF ISSUE	:	30 December 2016	PAGE	:	Page 1 of 1	

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		28 Dec 2016
Received Date	:	28 Dec 2016
Testing Period	:	28 Dec 2016 to 30 Dec 2016

### 3. Test Methods

Parameters		Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 28/12/2016	006	Total Suspended Solids	4.2	mg/L

--- END OF REPORT ----

<sup>a</sup> Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>6</sup> Test results relate only to the items received

APPROVED SIGNATORY:

John Chi-wai YAU Assistant Lab. Manager



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### **TEST REPORT**

JOB NO.	:	N16120567-1			
DATE OF ISSUE	:	04 January 2017	PAGE	:	Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited

Room 811, Hin Pui House,

Hin Keng Estate,

Tai Wai, Shatin, N.T., Hong Kong

Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results<sup>o</sup>

Sample I.D. marked by the customer	Sample No.	Parameters		Units
LT3 I5-1 30/12/2016	001	Total Suspended Solids	15	mg/L

---- END OF REPORT ----

<sup>a</sup> Information is provided by the customer <sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:

Chi



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### **TEST REPORT**

JOB NO.	:	N16120567-2	 			
DATE OF ISSUE	:	04 January 2017	PAGE	:	Page 1 of 1	ļ

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results°

			ts Units
LT3 15-2 30/12/2016 002	2 Total Suspended 3	Solids 15	mg/L

--- END OF REPORT ---

<sup>a</sup> Information is provided by the customer

APPROVED SIGNATORY:

Chi

<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

<sup>°</sup> Test results relate only to the items received



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### **TEST REPORT**

JOB NO.	: N16120567-3		
DATE OF ISSUE	: 04 January 2017	PAGE : Page 1 of 1	

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-1 30/12/2016	003	Total Suspended Solids	15	mg/L

---- END OF REPORT ----

<sup>a</sup> Information is provided by the customer

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<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:



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### **TEST REPORT**

JOB NO.	:	N16120567-4	 			
DATE OF ISSUE	:	04 January 2017	PAGE	:	Page 1 of 1	

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3a-2 30/12/2016	004	Total Suspended Solids	16	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

**APPROVED SIGNATORY:** 

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### **TEST REPORT**

JOB NO.	:	N16120567-5			
DATE OF ISSUE	:	04 January 2017	PAGE	:	Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

#### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

### 4. Test Results<sup>o</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-1 30/12/2016	005	Total Suspended Solids	3.6	mg/L

---- END OF REPORT ----

\* Information is provided by the customer

<sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA

° Test results relate only to the items received

APPROVED SIGNATORY:

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### **TEST REPORT**

JOB NO.	:	N16120567-6				
DATE OF ISSUE	:	04 January 2017	PAG	GE	:	Page 1 of 1

### 1. Customer

Enovative Environmental Service Limited Room 811, Hin Pui House, Hin Keng Estate, Tai Wai, Shatin, N.T., Hong Kong Attn.: Mr. Thomas Wong

### 2. Sample Identification

Sample Description	:	One batch(es) of water samples said to be discharge water were submitted by the customer and received at the laboratory in ambient condition.
Sampling	:	Conducted by the customer.
Sampling Date <sup>a</sup>		30 Dec 2016
Received Date	:	30 Dec 2016
Testing Period	:	30 Dec 2016 to 04 Jan 2017

### 3. Test Methods

Parameters	Reference Methods	Limits of Reporting
Total Suspended Solids dried at 103-105°C	APHA <sup>b</sup> 17e 2540 D	2.5 mg/L

#### 4. Test Results<sup>c</sup>

Sample I.D. marked by the customer	Sample No.	Parameters	Test Results	Units
LT3 C3b-2 30/12/2016	006	Total Suspended Solids	4.4	mg/L

--- END OF REPORT ---

\* Information is provided by the customer

° Test results relate only to the items received

APPROVED SIGNATORY:

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<sup>&</sup>lt;sup>b</sup> APHA Standard Methods for the Examination of Water and Wastewater, AWWA



# Appendix J Water Quality Monitoring Results and their Graphical Presentation

#### Project Name:

Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Date of Monitoring	12/2	2/2016			Weather :	Cloudy										
Monitoring	Time	Water	Temper	ature (oC)		рН	DO	(mg/L)	DO (% s	aturation)	Turbi	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	9:46	<0.5	20.2	20.2	7.1	7.1	6.7	6.7	71.1	71.2	6.6	6.6	<0.1	<0.1	12.0	12.0
000	5.40	<b>~0.0</b>	20.2	20.2	7.1	7.1	6.7	0.1	71.2	11.2	6.6	0.0	<0.1	<b>~0.1</b>	12.0	12.0
C3b	9:18	<0.5	19.2	19.2	7.3	7.3	7.0	7.0	75.9	75.9	6.8	6.8	<0.1	<0.1	8.1	8.2
030	3.10	<0.5	19.2	13.2	7.3	7.5	7.0	7.0	75.9	13.3	6.8	0.0	<0.1	<0.1	8.2	0.2
15	9:28	<0.5	19.0	19.0	7.3	7.3	7.0	7.0	75.4	75.4	6.0	6.0	<0.1	<0.1	5.5	6.6
15	3.20	<0.5	19.0	13.0	7.3	1.5	7.0	7.0	75.4	73.4	6.0	0.0	<0.1	<0.1	7.6	0.0

Date of Monitoring 12/5/2016

Weather : Sunny

Monitoring	Time	Water	Temper	rature (oC)	I	рН		(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:10	< 0.5	24.8	24.8	6.9	6.9	7.1	7 1	85.9	85.9	12.7	12.7	<0.1	<0.1	11.0	11.0
			24.8	24.0	6.9	0.5	7.1	7.1	85.9	00.5	12.7	12.7	<0.1	<b>CO.1</b>	11.0	11.0
C3b	11:40	<0.5	23.4	23.4	7.3	7.2	7.6	7.6	89.1	89.1	13.5	13.5	<0.1	<0.1	14.0	14.0
			23.4	23.4	7.3	1.3	7.6	7.0	89.1	09.1	13.5	13.5	<0.1	<0.1	14.0	14.0
15	11:59	<0.5	24.8	24.8	7.3	7.2	8.6	8.6	103.6	103.6	7.7	77	<0.1	<0.1	7.4	6.9
			24.8	24.0	73	7.3	86	0.0	103.6	103.0	77	1.1	<01	<0.1	64	0.9

Date of Monitoring 12/7/2016

#### Weather : Sunny

Monitoring	Time	Water	Temper	ature (oC)	F	bН	DO	(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	9:00	<0.5	19.8	19.8	6.8	6.8	6.6	6.6	72.3	72.3	20.0	20.0	<0.1	<0.1	22.0	27.0
	]		19.8	15.0	6.8	0.0	6.6	0.0	72.3	12.5	20.0	20.0	<0.1	<b>CO.1</b>	32.0	27.0
C3b	9:26	< 0.5	19.1	19.1	7.4	7.4	8.5	0 5	92.0	92.0	3.9	3.9	<0.1	<0.1	3.6	3.6
	1		19.1	19.1	7.4	7.4	8.5	8.5	92.0	92.0	3.9	3.9	<0.1	<0.1	3.6	3.0
15	9:38	<0.5	19.0	19.0	7.3	7.2	9.4	9.4	100.9	100.9	4.0	4.0	<0.1	<0.1	4.1	3.9
	1		19.0	19.0	7.3	1.5	9.4	9.4	100.9	100.9	4.0	4.0	< 0.1	<0.1	3.6	3.9

Date of Monitoring 12/9/2016

Weather: Sunny

Monitoring	Time	Water	Temper	ature (oC)	I	рН		(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	8:59	<0.5	18.0	18.0	7.0	7.0	7.2	7.2	76.0	76.0	5.9	5.9	<0.1	<0.1	7.8	6.7
			18.0	10.0	7.0	7.0	7.2	1.2	76.0	70.0	5.9	5.5	<0.1	<0.1	5.6	0.7
C3b	9:25	<0.5	18.0	18.0	7.3	7.3	8.8	8.8	92.7	92.7	3.2	3.2	<0.1	<0.1	2.9	2.9
			18.0	10.0	7.3	1.5	8.8	0.0	92.7	92.1	3.2	3.2	<0.1	<0.1	2.8	2.9
15	9:38	<0.5	17.5	17.5	7.3	73	9.1	9.1	95.3	95.3	3.9	3.9	<0.1	<0.1	2.8	2.7
			17.5	17.5	7.3	7.3	9.1	3.1	95.3	33.3	3.9	5.9	<0.1	<b>CO.1</b>	2.6	2.1

Date of Monitoring 12/12/2016

Weather : Sunny

Monitoring	Time	Water	Tempe	rature (°C)		ρH	DO	(mg/L)	DO (% s	aturation)	Turbi	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	12:04	<0.5	24.0	24.0	7.0	7.0	6.0	6.0	71.4	71.3	14.1	14.2	<0.1	<0.1	16.0	16.0
			24.0	24.0	7.0	7.0	6.0	0.0	71.2	71.5	14.2	14.2	<0.1	<0.1	16.0	10.0
C3b	11:12	<0.5	22.7	22.7	7.4	7.4	9.6	9.6	111.0	111.0	5.0	4.9	<0.1	<0.1	5.3	5.6
			22.7	22.1	7.4	7.4	9.6	9.0	110.9	111.0	4.8	4.9	<0.1	<0.1	5.8	5.0
15	11:19	<0.5	21.5	21.5	7.3	7.2	6.0	6.0	67.8	67.9	4.1	4.0	<0.1	<0.1	3.8	3.8
			21.5	21.5	7.3	1.5	6.0	0.0	68.0	07.9	3.9	4.0	< 0.1	<0.1	3.7	3.0

Date of Monitoring 12/14/2016

Weather : Sunny

Monitoring	Time	Water	Tempe	rature (°C)	I	рН		(mg/L)	DO (% s	aturation)	Turbi	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	10:49	<0.5	22.6	22.6	7.2	7.2	7.4	7.4	85.3	85.3	20.0	20.0	<0.1	<0.1	18.0	18.0
			22.6	22.0	7.2	1.2	7.4	7.4	85.3	00.0	20.0	20.0	<0.1	<0.1	18.0	10.0
C3b	11:14	<0.5	21.1	21.1	7.4	7.4	7.9	7.9	88.7	88.7	7.7	77	<0.1	<0.1	6.0	6.0
			21.1	21.1	7.4	7.4	7.9	1.5	88.7	00.7	7.7	1.1	<0.1	<0.1	6.0	0.0
15	11:30	<0.5	21.9	21.9	7.2	7.2	9.9	9.9	113.1	113.1	4.0	4.0	<0.1	<0.1	3.8	3.7
			21.9	21.5	7.2	1.2	9.9	3.5	113.1	113.1	4.0	4.0	<0.1	20.1	3.6	5.7

Date of Monitoring 12/16/2016

#### Weather : Sunny

Monitoring	Time	Water	Tempe	rature (°C)	I	рН		(mg/L)	DO (% s	aturation)	Turbi	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:34	<0.5	19.8	19.8	7.7	77	8.6	8.6	94.2	94.2	9.9	9,9	<0.1	<0.1	5.2	6.3
			19.8	15.0	7.7	1.1	8.6	0.0	94.2	34.2	9.9	3.5	<0.1	<0.1	7.4	0.5
C3b	11:55	<0.5	18.0	18.0	7.6	7.6	8.9	8.9	93.9	93.9	5.6	5.6	<0.1	<0.1	4.2	4.4
			18.0	10.0	7.6	7.0	8.9	0.9	93.9	93.9	5.6	5.0	<0.1	<0.1	4.5	4.4
15	12:09	<0.5	19.1	19.1	7.6	7.6	11.5	11.5	124.2	124.2	6.5	6.5	<0.1	<0.1	6.2	73
			19.1	13.1	7.6	7.0	11.5	11.5	124.2	124.2	6.5	0.5	<0.1	<0.1	8.4	1.5

Date of Monitoring	12/1	9/2016			Weather :	Sunny										
Monitoring	Time	Water	Tempe	rature (°C)	I	рН	DO	(mg/L)	DO (% s	aturation)	Turbi	dity (NTU)	Sali	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:10	<0.5	22.7	22.7	7.4	7.4	7.0	7.0	81.0	81.0	15.1	15.1	<0.1	<0.1	10.0	9.9
			22.7	22.1	7.4	7.4	7.0	7.0	81.0	01.0	15.1	13.1	<0.1	<0.1	9.7	3.3
C3b	11:38	<0.5	20.8	20.8	7.3	7.3	7.6	7.6	84.4	84.4	4.0	4.0	<0.1	<0.1	2.6	2.9
			20.8	20.8	7.3	1.5	7.6	7.0	84.4	04.4	4.0	4.0	<0.1	<0.1	3.1	2.9
15	11:55	<0.5	23.0	23.0	7.3	7.3	10.1	10.1	118.2	118.2	4.7	4.7	<0.1	<0.1	4.5	4.7
			23.0	23.0	7.3	1.5	10.1	10.1	118.2	110.2	4.7	4.7	< 0.1	<0.1	4.8	4.7

Date of Monitoring 12/21/2016

#### Weather : Cloudy

Monitoring	Time	Water	Tempe	rature (°C)	I	эΗ	DO	(mg/L)	DO (% s	aturation)	Turbio	lity (NTU)	Saliı	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	16:15	<0.5	22.6	22.6	7.0	7.0	6.0	6.0	69.8	69.8	22.0	22.0	<0.1	<0.1	11.0	14.0
			22.6	22.0	7.0	7.0	6.0	0.0	69.8	03.0	22.0	22.0	<0.1	<0.1	17.0	14.0
C3b	16:33	<0.5	21.6	21.6	7.1	7 1	7.4	7.4	84.2	84.2	5.6	E C	<0.1	<0.1	4.3	4.2
			21.6	21.0	7.1	7.1	7.4	7.4	84.2	04.2	5.6	5.6	<0.1	<0.1	4.1	4.2
15	16:45	<0.5	22.5	22.5	7.1	7 1	8.7	8.7	100.9	100.9	7.8	7.8	<0.1	<0.1	4.8	5.7
			22.5	22.5	7.1	7.1	8.7	0.7	100.9	100.5	7.8	7.0	<0.1	<0.1	6.5	5.7

Date of Monitoring 12/23/2016

Weather : Cloudy

#### Project Name:

Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Monitoring	Time	Water	Tempe	rature (°C)	I	ьΗ	DO	(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:07	<0.5	20.7	20.7	6.5	6.5	6.5	6.5	73.0	73.0	16.4	16.4	<0.1	<0.1	15.0	15.0
			20.7	20.7	6.5	0.5	6.5	0.5	73.0	75.0	16.4	10.4	<0.1	<b>CO.1</b>	15.0	15.0
C3b	11:25	<0.5	20.0	20.0	6.8	6.8	7.8	7.8	86.1	86.1	7.8	7.8	<0.1	<0.1	6.6	6.7
			20.0	20.0	6.8	0.0	7.8	7.0	86.1	00.1	7.8	1.0	<0.1	<b>CO.1</b>	6.7	0.7
15	11:34	<0.5	20.6	20.6	7.1	7 1	9.9	9,9	110.5	110.5	8.4	0.4	<0.1	<0.1	5.3	5.3
			20.6	20.0	71	7.1	99	9.9	110.5	110.5	84	0.4	<0.1	<0.1	53	0.5

Date of Monitoring 12/28/2016

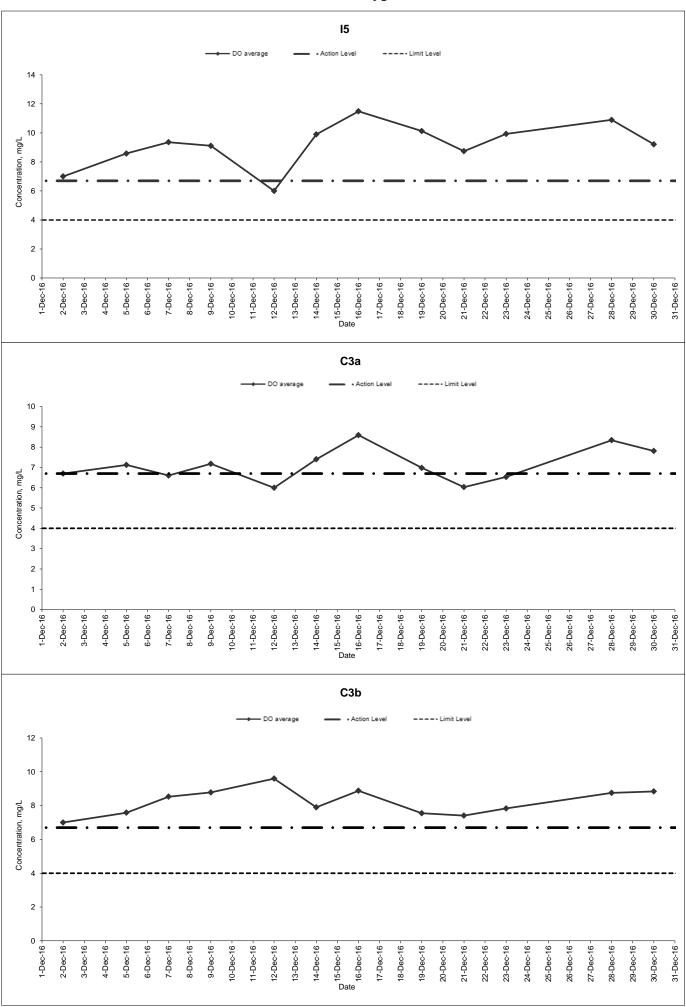
Weather : Cloudy

Monitoring	Time	Water	Tempe	rature (°C)	I	ρH	DO	(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:12	<0.5	17.2	17.2	6.9	6.9	8.3	8.3	86.7	86.7	9.8	9.8	<0.1	<0.1	9.0	8.6
			17.2	17.2	6.9	0.5	8.3	0.5	86.7	00.7	9.8	3.0	<0.1	<0.1	8.1	0.0
C3b	11:32	<0.5	16.5	16.5	7.0	7.0	8.8	8.8	89.7	89.7	10.4	10.4	<0.1	<0.1	5.8	5.0
			16.5	10.5	7.0	7.0	8.8	0.0	89.7	09.7	10.4	10.4	<0.1	<0.1	4.2	5.0
15	11:46	<0.5	16.7	16.7	7.1	71	10.9	10.9	112.2	112.2	5.2	5.2	<0.1	<0.1	5.3	4.7
			16.7	10.7	7.1	7.1	10.9	10.9	112.2	112.2	5.2	5.2	<0.1	<b>CO.1</b>	4.1	/

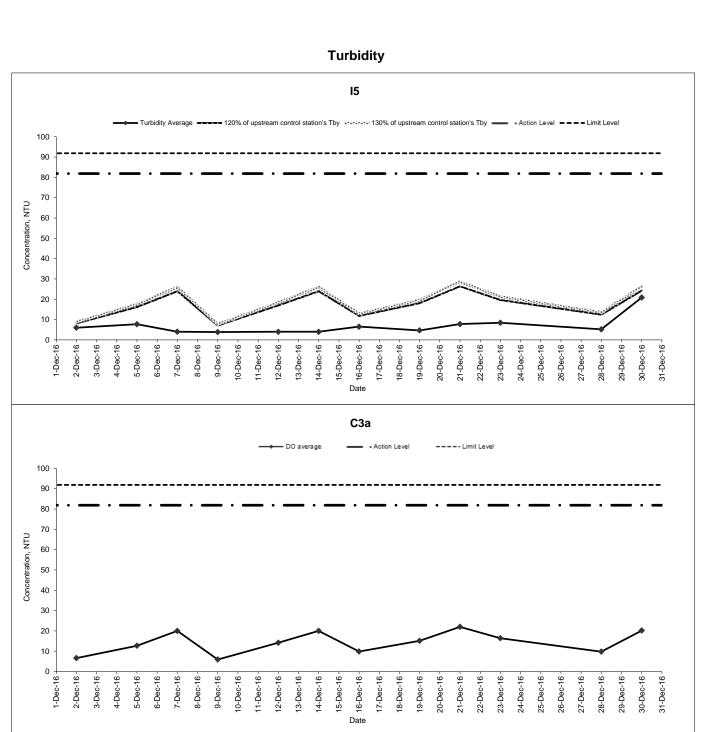
Date of Monitoring 12/30/2016

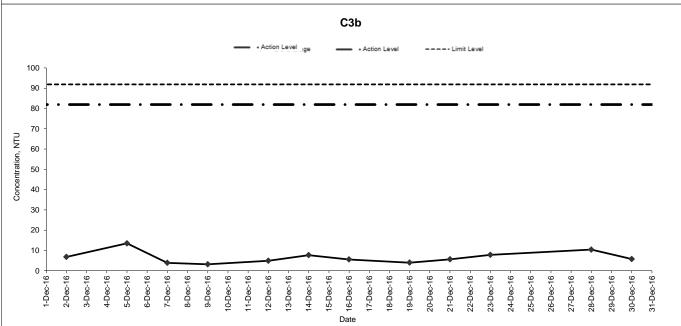
Weather: Cloudy

Monitoring	Time	Water	Tempe	rature (°C)	I	н	DO	(mg/L)	DO (% s	aturation)	Turbio	dity (NTU)	Salir	nity (g/L)	SS	(mg/L)
Location		Depth (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:19	<0.5	20.1	20.1	6.5	6.5	7.8	7.8	86.1	86.1	20.2	20.2	<0.1	< 0.1	15.0	15.5
			20.1	20.1	6.5	0.5	7.8	7.0	86.1	00.1	20.2	20.2	<0.1	<b>CO.1</b>	16.0	15.5
C3b	11:41	<0.5	17.6	17.6	6.7	6.7	8.8	8.8	92.7	92.7	5.8	5.8	<0.1	<0.1	3.6	4.0
			17.6	17.0	6.7	0.7	8.8	0.0	92.7	92.7	5.8	5.6	<0.1	<0.1	4.4	4.0
15	11:52	<0.5	19.5	19.5	6.9	6.9	9.2	9.2	100.4	100.4	20.9	20.9	<0.1	<0.1	15.0	15.0
			19.5	19.0	6.9	0.9	9.2	3.2	100.4	100.4	20.9	20.9	< 0.1	<b>CO.</b> 1	15.0	13.0

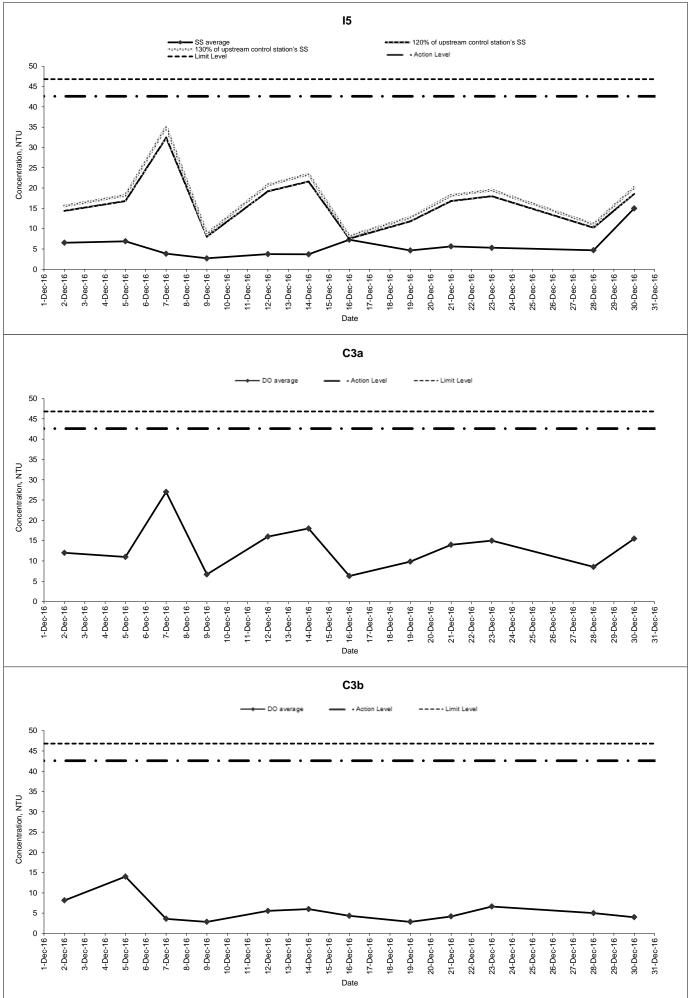


**Dissolved Oxygen** 





### **Suspended Solid**





# Appendix K Waste Flow Table

#### Monthly Summary Waste Flow Table

		Actual C	Quantities of Inc	ert C&D Materi	als Generated	Monthly		Actual	Quantities of	C&D Wastes	Generated M	Ionthly
		Hard Rock							Paper/			
	Total	and Large		Soil Reused	Soil Reused	Soil			cardboard			General
	Quantity	Broken		in the	in other	Disposed as			packaging		Chemical	Refuse
Month	Generated	Concrete	Soil	Contract	Projects	Public Fill	Imported Fill	Metals	(Note 3)	Plastics	Waste	(Note 2)
Unit	(in '000m <sup>3</sup> )	(in m <sup>3</sup> )	(in '000m <sup>3</sup> )									
Jan-16	2.683	0.253	2.430	0.030	-	2.400	0.799	0.001	-	-	-	0.115
Feb-16	1.876	0.651	1.225	0.020	-	1.205	1.141	-	-	-	-	0.110
Mar-16	1.501	0.417	1.084	-	-	1.084	0.831	-	-	0.001	-	0.090
Apr-16	0.472	0.046	0.426	0.018	-	0.408	0.647	-	-	-	-	0.135
May-16	0.488	0.013	0.475	-	-	0.475	2.479	-	-	-	-	0.105
Jun-16	0.523	0.103	0.420	-	-	0.420	0.716	-	-	0.001	-	0.135
Sub-Total	7.543	1.483	6.060	0.068	-	5.992	6.613	0.001	-	0.002	-	0.690
Jul-16	0.565	0.019	0.546	-	-	0.546	1.407	-	0.001	0.004	1.000	0.085
Aug-16	0.582	0.088	0.494	-	-	0.494	0.715	-	-	0.001	-	0.105
Sep-16	1.797	0.604	1.193	0.258	-	0.935	0.038	0.001	-	0.002	-	0.090
Oct-16	1.115	0.485	0.630	0.177	-	0.453	0.395	-	-	0.002	0.800	0.120
Nov-16	0.748	0.140	0.608	0.201	-	0.407	0.714	0.001	-	0.001	-	0.125
Dec-16	0.675	0.130	0.545	0.120	-	0.425	0.353	0.001	-	-	-	0.120
Total	13.025	2.949	10.076	0.824	-	9.252	10.235	0.004	0.001	0.012	1.800	1.335

Note: 1. Assume the density of soil fill is  $2 \text{ ton/m}^3$ .

2. Assume the density of rock and broken concrete is  $2.5 \text{ ton/m}^3$ .

3. Assume each truck of C&D wastes is 5m<sup>3</sup>.

4. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38.

5. The slurry and bentonite are disposed at Tseung Kwun O 137.

6. The non-inert C&D wastes are disposed at NENT.

7. Assume the density of metal is  $7,850 \text{ kg/m}^3$ .



# Appendix L Implementation Schedule of Environmental Mitigation Measures (EMIS)



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
Air Quality				
Air Quality during Construction	• Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading.	During Construction	Contractor	V
	• All stockpiles of excavated materials or spoil of more than 50m <sup>3</sup> shall be enclosed, covered or dampened during dry or windy conditions.			Rem
	• Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas.			✓
	<ul> <li>All spraying of materials and surfaces shall avoid excessive water usage.</li> </ul>			$\checkmark$
	• 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.			✓
	<ul> <li>Materials shall be dampened, if necessary, before transportation.</li> </ul>			$\checkmark$
	• Travelling speeds shall be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks.			✓
	• Vehicle washing facilities shall be provided to minimise the quantity of material deposited on public roads.			$\checkmark$
Air Quality during Operation	Not required	N/A	N/A	N/A
Noise				
Noise during Construction	• Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant.	During Construction	Contractor	$\checkmark$
	<ul> <li>Reduce the number of equipment and their percentage on-time.</li> </ul>			$\checkmark$
Noise during Operation	Not required	N/A	N/A	N/A
Water Quality				
Water Quality during	Road Widening Works, Earthworks and Culvert Extension Works			
Construction	• 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.	During Construction	Contractor	~



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
	• Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained.			<b>√</b>
	• 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.			✓
	• Regular inspections of stilling basins and/or silt traps is required to ensure that sediment is not conveyed into the existing drainage system.			✓
	<ul> <li>Open stockpiles should be covered with a tarpaulin cover.</li> </ul>			$\checkmark$
	• During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded.			✓
	• Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains.			✓
	• Fuels should be stored in bunded areas such that spillage can be easily collected.			✓
Water Quality during Operation	Not required	N/A	N/A	N/A
Waste Management		1		
Waste Management during Construction	General Waste			
	<ul> <li>Transport of wastes off site as soon as possible.</li> </ul>	During Construction	Contractor	✓
	Maintenance of accurate waste records.			<ul> <li>✓</li> </ul>
	• Minimisation of waste generation for disposal (via reduction/recycling/re-use).			~
	<ul> <li>No on-site burning will be permitted.</li> </ul>			~
	Use of re-useable metal hoardings/signboards.			✓
	Vegetation from site clearance			
	<ul> <li>Segregation of materials to facilitate disposal.</li> </ul>	During Construction	Contractor	$\checkmark$
	• Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas.			$\checkmark$



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
	Demolition Wastes			
	Segregation of materials to facilitate disposal.	During Construction	Contractor	✓
	Appropriate stockpile management.			✓
	Excavated Materials			
	Segregation of materials to facilitate disposal / reuse.	During Construction	Contractor	✓
	Appropriate stockpile management.			$\checkmark$
	• Re-use of excavated material on or off site (where possible).			✓
	• 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).	During Construction	Contractor	✓
	Appropriate stockpile management.			$\checkmark$
	<ul> <li>Planning to reduce over ordering and waste generation.</li> </ul>			$\checkmark$
	<ul> <li>Recycling and re-use of materials where possible (e.g. metal, wood from formwork)</li> </ul>			✓
	• For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal.			✓
	Bentonite Slurries			
	Bentonite slurries should be reused as far as possible.	During Construction	Contractor	N/A
	• Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94.			N/A
	Chemical Wastes			
	<ul> <li>Storage within locked, covered and bunded area.</li> </ul>	During Construction	Contractor	✓
	• The storage area shall not be located adjacent to sensitive receivers e.g. drains.			$\checkmark$
	<ul> <li>Minimise waste production and recycle oils/solvents where possible.</li> </ul>			$\checkmark$

Notes (<sup>#</sup>): ✓ – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
	• A spill response procedure shall be in place and absorption material available for minor spillages.			$\checkmark$
	<ul> <li>Use appropriate and labelled containers.</li> </ul>			$\checkmark$
	<ul> <li>Educate site workers on site cleanliness/waste management procedures.</li> </ul>			$\checkmark$
	• If chemical wastes are to be generated, the contractor must register with EPD as a chemical waste producer.			✓
	• The chemical wastes shall be collected by a licensed chemical waste collector.			$\checkmark$
	Municipal Wastes			
	• Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal.	During Construction	Contractor	~
	<ul> <li>Regular, daily collections are required by an approved waste collector.</li> </ul>			$\checkmark$
Waste Management during Operation	Not required.	N/A	N/A	N/A
Ecology				
Ecology during Construction	Accurate Delineation of Works Area			
	<ul> <li>Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats.</li> </ul>	During Construction	Contractor	¥
	• 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 maximise protection.			*
	Dust generation			
	There are a number of measures which shall be taken as specified in the Air Pollution Control (Construction Dust) Regulation on 'Dust Control Requirements, including the following key measures to be applied during construction:			
	<ul> <li>vehicle washing facilities to be provided at every discernible or designated vehicle exit point;</li> </ul>	During Construction	Contractor	✓



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
	• all temporary site access roads shall be sprayed with water to suppress dust as necessary;			✓
	• all dusty materials should be sprayed with water immediately prior to any handling; and			✓
	• all debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area.			$\checkmark$
	Surface Run-off			
	In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction Site Drainage'. Key measures include:			
	<ul> <li>Bund and cover stockpiles to avoid run-off;</li> </ul>	During Construction	Contractor	~
	• Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical;			✓
	• All vehicle maintenance to be undertaken within a bunded area; and			~
	• Maximise vegetation retention on-site to maximise absorption (minimise transport).			✓
Ecology during Operation	• To conduct compensatory ecological planting as specified in the latest landscape plans approved by EPD (Clause 2.6 of the Environmental Permit refers).	During Construction and operation	Contractor (during construction) / LCSD* (during operation) (Note: * The division of vegetation planting and maintenance responsibilities shall follow the guidelines stipulated in ETWB TCW No. 2/2004.)	N/A
Landscape and Visual			1	· 
Landscape and Visual during Construction	Preservation of Existing Vegetation			
	• Trees identified for retention within the project limit would be protected during the works	During Construction	Contractor	<b>√</b>
	• The tree transplanting and planting works shall be implemented by approved Landscape Contractors			✓



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status <sup>#</sup>
	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.	During Construction	Contractor	×
	Hoarding			
	A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSRs.	During Construction	Contractor	$\checkmark$
	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.	During Construction	Contractor	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.	During Construction	Contractor	N/A
Landscape and Visual during Operation	Not required.	N/A	N/A	N/A



# Appendix M Investigation Report for Exceedances

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

## Investigation Report of Environmental Quality Exceedance(s) Ref. No.: W161212\_DO

Date	12 December 2016
Time	11:19 AM
Monitoring Location	15 - downstream of Ma Wat River at Yuen Leng
Parameter	Dissolved Oxygen
Action / Limit Levels	Action Level: 6.7 mg/L Limit Level: 4 mg/L or 40% saturation at 15 degree Celsius
Measured Level	6.0mg/L (Action level being exceeded)
Possible reason for the exceedance	According to the Contractor's work programme, there was no construction works being carried out in the proximity of the river channel during the water sampling on 12 December 2016 (refer to the attached photos) and the exceedance would unlikely due to the construction site.
Action taken / to be taken	As the non-compliance was non-project related, no further investigation and remedial measure(s) would be required.
Remarks	-

Site photos at I5 during water sampling (Date: 12 December 2016)







# Appendix N Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions



### Cumulative Complaint Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
C131126	26, November, 2013	Mr. Tony Hung from WWF	Mat Wat River (works sites for box culvert extension)	Suspected unauthorised discharge of water from a construction site to Ma Wat River, Tai Wo Service Road East, Tai Po	It was found that the water leaving the end of the steel pipes was the diverted water from the upstream of the existing box culverts, instead of being discharged from the construction works sites. An EM&A Programme is being undertaken to monitoring the environmental performance of the construction works, and the Contractor has also implemented appropriate mitigation measures to avoid silt-laden runoff discharging from the works sites into the river. The complaint is considered an invalid complaint under this Project.	Completed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
C141120	20 November, 2014	EPD	Ng Tung River and Ma Wat River nearby the site of the Liantang/ Heung Yuen Wai BCP Project (Contract Number CV/2012/09)	At Bridge NF426 in Fanling, the whole Ng Tung River showed milky and suspected illegal discharge by nearby factory has undertaken. (粉嶺近天橋編號 NF426 梧桐河整條河 河水呈奶白色懷疑附 近有工廠非法排放污 水)	<ul> <li>Water Supplies Department (WSD) conducted a washout procedure on 20 November 2014 at about 9:30am to flush the newly installed water pipe of diameter of 1400mm which has recently finished disinfection. It is understood that the procedure has lasted for about 1 hour and large amount of freshwater has been discharged into the Ma Wat River through a washout port.</li> <li>Although water was observed seeping from the gantry switch and flew into the works sites, the area is a sump pit and the water was unlikely to run off and entered the river directly. As such, it is anticipated that only freshwater has been discharged into Ma Wat River through the washout port.</li> <li>Both site inspections conducted by the ET before the complaint (19 November 2014), and after the complaint (24 November 2014) did not identify any deficiencies on environmental mitigation measures. Also, there were no rains during the period and the risk of construction site run-off is considered minimal.</li> </ul>	Completed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					The water from the Ma Wat Channel adjoins the Ng Tung River before passing through the complaint location, so other pollution sources may also occur at upstream of Ng Tung River	
					The complaint is considered unlikely due to the construction works of this project.	



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