Civil Engineering and Development Department

Environmental Monitoring Works at Kai Tak Development

Water, Sediment & Odour Quality Report

September and October 2014

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EXECUTIVE SUMMARY

Introduction

1. This is the 20th Water, Sediment & Odour Report for Environmental Monitoring Works for Kai Tak Development during construction phase (the Project). This report documents the results and findings of the 18th odour patrol works conducted for the Project in September and October 2014.

General water quality monitoring works

2. General marine water quality monitoring shall be carried out quarterly at the designated locations to give adequate coverage of different tidal states during both wet and dry seasons. During each survey event, sampling shall be taken at 2 tide conditions (mid-flood and mid-ebb). No general water quality monitoring for the Project was performed in the reporting period.

Odour Sampling Works

3. Odour sampling shall be carried out within Kai Tak Approach Channel (KTAC) and Kowloon Tong Typhoon Shelter (KTTS) as well as along To Kwa Wan (TKW) and Ma Tau Kok (MTK) waterfront half-yearly interval to determine the odour emissions from water surface throughout the Contract and Maintenance Period. The first odour sampling shall be carried within the August of 2011 or as agreed with the Engineer. One of the sampling events within each calendar year shall be undertaken during summer season (i.e. July or August). No Odour Sampling for the Project was performed in the reporting period.

Odour Patrol Works

4. Odour patrol shall be carried out in the month of February, May, July, August, September and November along the same odour route and at the same sniffing locations. The first odour patrol shall be carried out within November 2011. The 18th odour patrol for the Project was performed on 10th, 11th, 24th, 25th & 26th September 2014 and the monitoring results were checked and reviewed.

Sediment Monitoring Works

5. Sediment monitoring shall be carried out at the same locations of the odour sampling stations half-yearly interval throughout the Contract Period. The first sediment sampling shall be carried out within the August of 2011 or as agreed with the Engineer. No Sediment Monitoring for the Project was performed in the reporting period.

6. In addition, no environmental monitoring works were conducted in October 2014.

1. Introduction

Background

1.1 In accordance with the approved Kai Tak Development (KTD) Schedule 3 EIA, improvements works have been proposed to alleviate the potential odour impact from Kai Tak Approach Channel (KTAC) and Kwan Tong Typhoon Shelter (KTTS). In order to monitor the effectiveness and impacts of the proposed works, environmental monitoring works of water, sediment and odour quality were conducted for Kai Tak Development (the Project).

1.2 This is the 20th Water, Sediment & Odour Quality Monitoring Reports summarizing the general water quality monitoring works and odour patrol works for the Project in September and October 2014.

2. General Water Quality monitoring

Monitoring Requirements

2.1 General marine water quality monitoring shall be carried out quarterly at the designated locations to give adequate coverage of different tidal states during both wet and dry seasons.

2.2 The first general marine water quality monitoring during construction phase shall be carried out within the summer season of 2011 or as agreed with the Engineer.

2.3 For all the monitoring stations, sampling was taken 3 water depths, namely 1m below the water surface, mid depth and 1m above the sea bed. For stations that are less than 3m in depth, only the mid depth sample was taken. Mid-depth was omitted in case the water depth is less than 6m. During each survey event, sampling was taken at 2 tide conditions (mid-flood and mid-ebb).

2.4 For the WSD intake points, the monitoring was conducted at the appropriate vertical levels of the abstraction points of these intakes to collect water quality information.

2.5 At each monitoring station, duplicate samples were collected at each water depth.

2.6 Sufficient volume of each water sample (not less than 1 litre) was collected for analysis to achieve the required detection limit. *In-situ* measurements at DO, pH, salinity, temperature and turbidity were taken at 0.5m depth intervals at all the marine water quality monitoring stations.

Monitoring Locations

2.7 The monitoring locations include seven stations within the approach channel (AC1-7), one station at the KTTS (KT1), three stations at inner Kowloon Bay (IB1-3), one station at outer Kowloon Bay (OB1), two stations in the Victoria Harbour adjacent to the Kowloon Bay (VH1-2), one station in the vicinity of Jordan Valley Culvert (JVC), one station Kai Tak Nullah (KTN) and four stations at the WSD flushing water intakes. The locations are also summarized in Table 2.1 and shown on **Figure 1**.

Table 2.1 Water Quality Monitoring Stations

Monitoring Stations	Coordinates	
	Northing	Easting
AC1	820147.04	838736.55
AC2	820218.32	838807.83
AC3	819920.71	838952.22
AC4	819988.82	839030.88
AC5	819690.85	839214.12
AC6	819755.00	839278.27
AC7	819545.62	839418.24
KT1	819010.57	840260.66
IB1	819861.53	838265.60
IB2	819465.93	838456.29
IB3	819176.01	838054.63
OB1	819134.25	839182.22
VH1	817553.42	837739.09
VH2	817588.53	840243.13
KTN	820399.67	838776.18
JVC	819940.86	839165.73
WSD Intake at Tai Wan	818268.40	837952.00
WSD Intake at Cha Kwo Ling	817836.40	841544.20
WSD Intake at Quarry Bay	817056.00	839752.00
WSD Intake at Sai Wan Ho	816451.38	841215.41

Monitoring Equipment

Dissolved Oxygen (DO) and Temperature Measuring Equipment

2.8 The instrument for measuring dissolved oxygen and temperature was portable and weatherproof complete with cable, sensor, comprehensive operation manuals and use DC power source. It was capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/L and 0-200% saturation; and
- a temperature of 0-45 degree Celsius.

2.9 It has a membrane electrode with automatic temperature compensation complete with a cable.

2.10 Sufficient stocks of spare electrodes and cables were available for replacement where necessary.

2.11 Salinity compensation was built-in in the DO equipment.

Turbidity

2.12 Turbidity was measured *in situ* by the nephelometric method. The instrument was portable and weatherproof using a DC power source complete with cable, sensor and comprehensive operation manuals. The equipment was capable of measuring turbidity

between 0-1000 NTU. The probe cable was not less than 25m in length. The meter was calibrated in order to establish the relationship between NTU units and the levels of suspended solids. The turbidity measurement was carried out on split water sample collected from the same depths of suspended solids samples.

Sampler

2.13 A water sampler, consisting of a transparent PVC or glass cylinder of a capacity of not less that two litres which can be effectively sealed with cups at both ends shall be used. The water sampler has a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

Water Depth Detector

2.14 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station.

pH

2.15 The instrument was consisting of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It was readable to 0.1pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 shall be used for calibration of the instrument before and after use.

Salinity

2.16 A portable salinometer capable of recording salinity within the range of 0-40 ppt shall be used for salinity measurements.

Position System

2.17 A hand held differential Global Positioning System (GPS) shall be used during water quality monitoring to ensure the monitoring vessel is at the correct location before taking measurements. GPS shall be calibrated at checkpoint (Quarry Bay Survey Nail at Easting 840683.49 and Northing 816709.55) to ensure the monitoring station was at the correct position before taking measurement and water samples.

Sample Container and Storage

2.18 Following collection, water samples for laboratory analysis shall be stored in high density polythene bottles with appropriate preservatives added, packed in ice (cooled to 4°C without being frozen), delivered to the laboratory and analysed as soon as possible. Sufficient volume of samples was collected to achieve the detection limit.

2.19 For the sample containers for *E. coli*, the water samples were collected in sterile bottles with leakproof lids.

Calibration of *In Situ* Instruments

2.20 All *in situ* monitoring instruments shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes shall be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring event.

2.21 For the on site calibration of field equipment (Multi-parameter Water Quality System), the BS 1427:2009, "Guide to on-site test methods for the analysis of waters" shall be observed.

2.22 Sufficient stocks of spare parts shall be maintained for replacements when necessary. Backup monitoring equipment shall be available so that monitoring can proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

Monitoring Parameters

2.23 The monitoring parameters to be measured *in-situ* and in laboratory are summarized in Table 2.2.

Table 2.2 Water Quality Monitoring Parameters

***In-situ* Measurement**	**Laboratory Measurement**
Dissolved Oxygen	Suspended Solids (SS)
pH	*E. coli*
Water Temperature	5-day Biochemical Oxygen Demand (BOD_5)
Salinity	Ammonia Nitrogen (NH_3-N)
Secchi disc depth	Unionized Ammonia (UIA)
Turbidity	Total Kjeldahl Nitrogen (TKN)
	Nitrite-nitrogen (NO_2-N)
	Nitrate-nitrogen (NO_3-N)
	Ortho-phosphate (PO_4)
	Total Phosphorous (TP)
	Cadmium (Cd)
	Chromium (Cr)
	Copper (Cu)
	Mercury (Hg)
	Nickel (Ni)
	Lead (Pb)

	Silver (Ag)
	Zinc (Zn)

2.24 Monitoring location/position, time, water depth, sampling depth, pH, salinity, DO saturation, water temperature, tidal stages, weather conditions and any special phenomena or work underway nearby were recorded.

Monitoring Frequency

2.25 General marine water quality monitoring shall be carried out quarterly at the designated locations to give adequate coverage of different tidal states during both wet and dry seasons.

2.26 During each survey event, sampling will be taken at 2 tide conditions (mid-flood and mid-ebb) to give adequate coverage of different tidal states during both wet and dry seasons.

2.27 The monitoring will be ceased in the events of any emergency sewage discharges from the preliminary treatment works (PTWs) on both sides of the Victoria Harbour. Monitoring will be avoided during and after any storm events where sewage overflow may be anticipated from the PTWs. There will not be any marine construction activities in the vicinity of the stations during the monitoring.

Monitoring Methodology

2.28 The monitoring stations shall be accessed using survey boat to within 3 m by the guide of a hand-held Global Positioning System (GPS). The depth of the monitoring location shall be measured using depth meter in order to determine the sampling depths. Afterwards, the probes of the in-situ measurement equipment shall be lowered to the predetermined depths (1 m below water surface, mid-depth and 1 m above seabed) and the measurements shall be carried out accordingly. The in-situ measurements at predetermined depths shall be carried out in duplicate. In case the difference in the duplicate in-situ measurement results was larger than 25%, the third set of in-situ measurement would be carried out for result confirmation purpose.

2.29 Water sampler shall be lowered into the water to the required depths of sampling. Upon reaching the pre-determined depth, a messenger to activate the sampler shall then be released to travel down the wire. The water sample shall be sealed within the sampler before retrieving. At each station, water samples at three depths (1 m below water surface, mid-depth and 1 m above seabed) shall be collected accordingly. Water samples shall be stored in a cool box and kept at less than 4°C but without frozen and sent to the laboratory as soon as possible. In addition, field information as described in Section 2.24 shall also be recorded.

Laboratory Analytical Methods

2.30 The testing of all parameters will be conducted by Wellab Ltd. (HOKLAS Registration No.083) and comprehensive quality assurance and control procedures in place in order to ensure quality and consistency in results. The testing method, lowest detection limit and limit of reporting are provided in Table 2.3.

Table 2.3 Methods for Laboratory Analysis for Water Samples

Determinant	Proposed Method	Limit of Reporting	Lowest Detection Limit
Cadmium (Cd)	In-house Method SOP 053 (ICP-ES) and SOP 076 (ICP-MS) [Ref. Method: APHA 19e 3030F 3b and 3120B, USEPA 3005A & 6020A]	0.1 μg/L	0.1 μg/L
Chromium (Cr)		0.2 μg/L	0.2 μg/L
Copper (Cu)		0.2 μg/L	0.2 μg/L
Silver (Ag)		0.2 μg/L	0.2 μg/L
Nickel (Ni)		0.2 μg/L	0.2 μg/L
Zinc (Zn)		0.4 μg/L	0.4 μg/L
Lead (Pb)		0.2 μg/L	0.2 μg/L
Mercury (Hg)		0.2 μg/L	0.2 μg/L
Suspended Solids (SS)	APHA 17ed 2540 D	0.5 mg/L	0.5 mg/L
5-day Biochemical Oxygen Demand (BOD_5)	APHA 19ed 5210 B	2 mg-O_2/L	0.4 mg-O_2/L
Ammonia Nitrogen (NH_3-N)	In-house method SOP057 (FIA) [Ref. Method: APHA 20e 4500-NH_3 H (FIA)]	0.01mg NH_3-N/L	0.01mg NH_3-N/L
Unionized Ammonia (UIA)	By Calculation	0.001mg/L	-
Total Kjeldahl Nitrogen (TKN)	In-house method SOP058(FIA) [Ref. Method: APHA 20e 4500-Norg A,B,D (FIA)]	0.1mg N/L	0.1mg N/L
Nitrite-nitrogen (NO_2-N)	In-house Method SOP068 (FIA) [Ref. Method: APHA 20e 4500-NO_2^- B (FIA)]	0.002 mg NO_2^--N/L	0.002 mg NO_2^--N/L
Nitrate-nitrogen (NO_3-N)	In-house Method SOP056 (FIA) [Ref. Method: APHA 20e 4500-NO_3^- F (FIA)]	0.01 mg NO_3^--N/L	0.01 mg NO_3^--N/L
E. coli	In-house method SOP069 (Membrane Filtration Method by CHROMagar) [Ref. Method: APHA 20e 9221E & 9222D]	1 cfu/100mL	1 cfu/100mL
Ortho-phosphate (PO_4)	In-house Method SOP054 (FIA) [Ref. Method: APHA 20e 4500-P A,F,G (FIA)]	0.01mg PO_4^{3-}-P/L	0.01mg PO_4^{3-}-P/L
Total Phosphorous (TP)	In-house Method SOP 055 (FIA) [Ref. Method: APHA 20e 4500-P B,E,F,H (FIA)]	0.01 mg-P/L	0.01 mg-P/L

2.31 To calculate the amount of unionized ammonia present (UIA), the Total Ammonia Nitrogen (TAN) must be multiplied by the appropriate factor based on the pH and temperature from the water sample. The calculation is in accordance with Ambient Water Quality Criteria for Ammonia published by United States Environmental Protection Agency. The lowest reporting limit of UIA is 0.001mg/L.

QA/QC Requirements

Decontamination Procedures

2.32 Water sampling equipment used during the course of the monitoring programme shall be decontaminated by manual washing and rinsed clean seawater/distilled water after each sampling event. All disposal equipment shall be discarded after sampling.

Sampling Management and Supervision

2.33 Water samples shall be dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples shall be stored in a cool box and kept at less than 4°C but without frozen. All water samples shall be handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.

Quality Control Measures for Sample Testing

2.34 The samples testing shall be performed by HOKLAS accredited laboratories. The following quality control programme shall be performed by the laboratories for each batch of samples:

- ✧ Method blank;
- ✧ Sample duplicate (at 5% level i.e. one for every 20 samples);
- ✧ Sample spike (at 5% level i.e. one for every 20 samples); and
- ✧ Quality control samples.

Results and Observation

2.35 No general water quality monitoring was conducted in the reporting period. The last water quality monitoring was conducted in August 2014 and the next monitoring will be carried out in November 2014.

3. Odour Sampling

Sampling Requirements

3.1 The odour sampling shall be carried out within Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (KTTS) as well as To Kwa Wan (TKW) and Ma Tau Kok (MTK) waterfront at half-yearly interval to determine the odour emissions from water surface throughout the Contract Period.

3.2 The first odour sampling shall be carried within the August of 2011 or as agreed with the Engineer. One of the sampling events within each calendar year shall be undertaken during summer season (i.e. July or August).

3.3 In order to capture more representative results, measurements and sampling will be conducted during low tide periods with reference to the tidal chart of Hong Kong Observatory for KTAC, KTTS and TKW.

3.4 The relevant meteorological data (e.g. ambient temperature, wind speed and direction, etc.) from the Hong Kong Observatory station during the measurement/sampling period were recorded for reference.

3.5 The odour sample was not contaminated, lost, or altered during storage. In this regard, the odour sampling bag shall:

- Odour-free, i.e. they will not add odours to the sample;
- Made of materials which does not absorb or react with odorous samples;
- Sufficiently impervious to prevent any significant loss of odour components;
- Reasonably robust;
- Leak-free;
- Equipped with leak-free fittings, compatible with olfactometer and other sampling equipment; and
- Of sufficient capacity to enable the completion of the tests.

3.6 Exposure of samples to direct sunlight was avoided to minimize photochemical reactions.

Monitoring Requirements

3.7 The following parameters were also monitored at each of the measurement locations.

- Dissolved oxygen (DO) (% saturation) in the water column at depth 1m above seabed;
- Dissolved oxygen (DO) (mg/L) in the water column at depth 1m above seabed;
- Water Temperature (°C) at depth 1m above seabed;
- Ambient Air Temperature (°C)
- Water depth (m)
- Salinity (parts per thousand) at depth 1m above seabed;

- Redox Potential (mV) at depth 1m above seabed; and
- pH at depth 1m above seabed.

Monitoring Locations

3.8 Thirteen monitoring stations are proposed for the odour sampling. The locations are also summarized in Table 3.1 and shown on **Figure 2**.

Table 3.1 Odour Sampling Stations

Location ID	Sampling Location	Coordinates	
		Easting	Northing
SA1	Northern KTAC, in the vicinity of Kai Tak Nullah (KTN)	838744.13	820311.91
SA2	Northern KTAC	838840.95	820030.07
SA3	Northern KTAC, in the vicinity of Jordan Valley Culvert (JVC) Outfall	839163.99	819942.90
SA4	Southern KTAC	839407.66	819537.90
SA5		839580.35	819512.47
SA6		839647.87	819329.45
SA7	KTTS	840122.60	819275.72
SA8		840270.71	819015.35
SA9		840479.55	818798.14
SA10	Kowloon Bay (between runway opening and TKWTS)	838694.90	819582.080
SA11	MTK waterfront, at the end of Ma Tau Kok Road	838138.20	820038.77
SA12	TKW waterfront, near Vehicle Examination Centre	837982.97	819704.84
SA13	Hoi Sham Park waterfront	837857.15	819436.94

Monitoring Equipment

Dissolved Oxygen (DO) and Temperature Measuring Equipment

3.9 The instrument for measuring dissolved oxygen and temperature shall be portable and weatherproof complete with cable, sensor, comprehensive operation manuals and use DC power source. It was capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/L and 0-200% saturation; and
- a temperature of 0-45 degree Celsius.

3.10 It has a membrane electrode with automatic temperature compensation complete with a cable.

3.11 Sufficient stocks of spare electrodes and cables shall be available for replacement where necessary.

3.12 Salinity compensation is built-in in the DO equipment.

Water Depth Detector

3.13 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station.

pH

3.14 The instrument shall be consisting of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It shall be readable to 0.1pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 shall be used for calibration of the instrument before and after use.

TM39 (mV meter)

3.15 The meter features high accuracy, rugged plastic enclosure, microprocessor controlled evaluation and operation with pH or redox combination electrodes. The measuring range shall be from -1999 to 1999 mV.

Thermo-Anemometer

3.16 The meter capable of record up to 2-hour air velocity averaging for measurements and temperature measurement via built-in thermistor.

Salinity

3.17 A portable salinometer capable of recording salinity within the range of 0-40 ppt shall be used for salinity measurements.

Position System

3.18 A hand held differential Global Positioning System (GPS) shall be used during odour sampling to ensure the monitoring vessel is at the correct location before taking measurements. GPS shall be calibrated at checkpoint (Quarry Bay Survey Nail at Easting 840683.49 and Northing 816709.55) to ensure the monitoring station was at the correct position before taking measurement and odour samples.

Calibration of *In Situ* Instruments

3.19 All *in situ* monitoring instruments shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes shall be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring event.

3.20 The thermo-anemometer shall be checked and calibrated at yearly intervals.

3.21 The BS 1427:2009, "Guide to on-site test methods for the analysis of waters" shall be observed for the on site calibration of field equipment (Multi-parameter Water Quality System).

3.22 Sufficient stocks of spare parts shall be maintained for replacements when necessary. Backup monitoring equipment shall be available so that monitoring can proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

Monitoring Parameters and Frequency

3.23 Table 3.2 summarizes the monitoring parameters and frequencies of the odour sampling at each of the measurement locations.

Table 3.2 Odour Sampling Parameters and Frequency

Monitoring Stations	Parameters, unit	Frequency
SA1 SA2 SA3 SA4 SA5 SA6 SA7 SA8 SA9 SA10 SA11 SA12 SA13	• Dissolved oxygen (DO) (% saturation) in the water column at depth 1m above seabed; • Dissolved oxygen (DO) (mg/L) in the water column at depth 1m above seabed; • Water Temperature (°C) at depth 1m above seabed; • Ambient Air Temperature (°C) • Water depth (m) • Salinity (parts per thousand) at depth 1m above seabed; • Redox Potential (mV) at depth 1m above seabed; and • pH at depth 1m above seabed.	• Half-yearly
	• One odour sample was collected at each measurement location for olfactometry analysis in laboratory	

Laboratory Analytical Methods

Olfactometry Analysis in Laboratory (The Hong Kong Polytechnic University)

3.24 The odour samples shall be collected using a hood method such as a wind tunnel system with the inflow rate with speed of 0.01 m/s and the odour concentration of the collected air samples were determined by a forced-choice dynamic olfactometer with a panel of human assessors being the sensor in accordance with the European Standard Method: Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725) within 24 hours after collection. About 60L of gas sample shall be collected at the selected sampling location.

3.25 The collected odour samples will be delivered to the laboratory (PolyU) within 24 hours after collection.

3.26 The odour laboratory shall be ventilated to maintain an odour-free environment and to provide fresh air to the panel members. Each odour testing session comprised at least five qualified panelists. All of the panelists shall be screened beforehand by using 48ppm solution/mixture of certified n-butanol standard gas.

3.27 The olfactometry method is normally used for a source odour concentration analysis with a detection limit of 10ou/m^3.

QA/QC Requirements

3.28 During each odour sampling day, one blank sample shall be collected for quality control. The sample shall be taken by purging pure nitrogen gas into odour sampling bag directly on site as a blank sample.

3.29 The olfactometry analysis will be conducted by laboratory (PolyU) complying with the European Standard EN13725:2003.

Results and Observation

3.30 No odour sampling was conducted in the reporting period. The last odour sampling was conducted in August 2014 and the next monitoring will be carried out in February 2015.

4. Odour Patrol

Monitoring Methodology

4.1 During the patrol, the patrol members shall conduct the odour intensity analysis. The sequence shall generally start from less odorous locations to stronger odorous locations. The independent trained personnel/competent persons shall use their nose (olfactory sensors) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance shall be identified. No odour patrol shall be conducted during rainy days.

4.2 The odour intensity should be determined at 5 different levels according to the criteria below:

0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
1 - Slight Identifiable odour, and slight chance to have odour nuisance;
2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
3 - Strong Identifiable, likely to have odour nuisance;
4 - Extreme Severe odour, and unacceptable odour level.

Odour Patrol Survey

4.3 Two qualified odour patrol members, Mr. Tang Wing Kwai and Mr. Lee Man Hei were selected for conducting odour patrol. The qualified odour patrol members have their individual n-butanol thresholds complied with the requirement of European Standard Method (EN13725) in the range of 20 to 80 ppb. The certificates for the qualified odour panel members are shown in **Appendix B**.

4.4 The odour patrol along with the odour route with 65 sniffing locations was conducted by the 2 qualified odour patrol members in September 2014 during daytime (low tide condition) and evening/night time (high tide condition).

4.5 In general, the proposed odour patrol route and the proposed sniffing locations is in the vicinity of the planned ASRs within the Kai Tak Development to determine any potential operational odour impacts arising from Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (KTTS).

4.6 Sniffing location no. 35 is shifted to the right side about 100m in compare with the EM&A Manual due to the access problem. In addition, sniffing location no. 29 and 30 are now situated at the restricted area of Cruise Terminal Building (CTB) and therefore it was revised to the landscape deck of CTB which is considered as ASRs. The final odour patrol route and sniffing locations is shown in **Figure 3**.

4.7 The duration of the odour patrol works are shown in the following table:-

Date	Time	Tidal Condition	Patrol Locations	* Height(m)
10 September 2014	09:38 – 13:00	High Tide	Within Kai Tak Development and Ma Tau Kok Waterfront	1.9 – 2.4
10 September 2014	16:19 – 18:00	Low Tide		0.7 – 1.1
11 September 2014	09:39 – 12:14	High Tide		2.0 – 2.3
11 September 2014	16:37 – 18:00	Low Tide		0.8 – 0.9
24 September 2014	16:00 – 17:00	Low Tide		0.9 – 1.2
25 September 2014	16:20 – 16:50	Low Tide		1.0 – 1.1
26 September 2014	16:00 – 17:00	Low Tide		1.0 – 1.1

***** Heights of High/Low Tides obtained from The Hong Kong Observatory (Predicted Tides at Quarry Bay)

4.8 During the odour patrol survey, the following findings shall be recorded:

- the prevailing weather condition (sunny, fine, cloudy and rainy);
- the wind direction;
- the local wind speed;
- odour intensity;
- any odour detected during sampling and the flavors of odour with detail description of characteristics (e.g. sewage or rotten egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc);
- potential odour source (exposed sediment, water or sewage; floating debris or material, others (to be specified));
- downwind or upwind direction from the odour source;
- duration of odour (intermittent or continuous) during sampling;
- tidal conditions; and
- time of survey.

4.9 Odour intensity at each location shall be assessed by the 2 odour patrol members, respectively, and all locations are shown in **Figure 3**.

Monitoring Equipment

Thermo-Anemometer

4.10 The meter capable of record up to 2-hour air velocity averaging for measurements and temperature measurement via built-in thermistor.

4.11 Table 4.1 summarizes the equipment used in the odour patrol survey. Copies of the calibration certificates of the equipment are shown in **Appendix A**.

Table 4.1 Equipment for Odour Monitoring Program

Equipment	Model and Make	Qty.
Thermo-Anemometer	Prova Instruments Inc. (Model No. AVM-01)	1

Calibration of In Situ Instruments

4.12 All in situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use.

4.13 The thermo-anemometer was checked and calibrated at yearly intervals.

4.14 Backup monitoring equipment was also made available so that monitoring can proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

Odour Patrol Results and On-Site Observations

4.15 All results of odour patrol survey for 65 sniffing locations in September 2014 are summarized in Table 4.2 for different routes within Kai Tak Development and Ma Tau Kok Waterfront and the field record sheets are attached in **Appendix D**.

4.16 In addition, meteorological conditions (including temperature, wind speed, wind direction, relative humidity) from the nearest Hong Kong Observatory's Weather Station including King's Park and Kai Tak meteorological stations during the monitoring are provided in **Appendix E**.

4.17 During the odour patrol investigation, our patrol members identified different types of flavours including sewage, fishy smell and engine oil smell. It is identified by the odour patrol members that these types of flavours mainly result from marine water, water at Kai Tak Nullah, exposed shores and other activities near the sniffing locations.

4.18 According to Kai Tak Schedule 3 EIA Report, the seawater smell is considered as non-objectionable background smell.

4.19 The odour intensity detected at 65 locations was found to be in a wide range from level 0 up to level 1.

Table 4.2 – Summary of Odour Patrol Results in September 2013

Sniffing Location	Area	Odour Intensity				General On-site Observation	
		High Tide (Evening/ Night Time)		Low Tide (Daytime)		Odour nature	Possible source
		OI-1	OI-2	OI-1	OI-2		
1	Kwun Tong Typhoon Shelter	0	0	0	0	N/A	N/A
2		0	0	0	0	N/A	N/A
3		0	0	0	0	N/A	N/A
4		0	0	0	0	N/A	N/A
5		0	0	0	0	N/A	N/A
6	Southern Kai Tak Approach Channel	0	0	0	0	N/A	N/A
7		1	1	0	0	Fishy smell	Marine water
8	Northern Kai Tak Approach Channel	0	0	0	0	N/A	N/A
9		1	1	1	1	Sewage	Marine water
10		0	0	0	0	N/A	N/A
11		0	0	0	0	N/A	N/A
12		1	1	0	0	Sewage	Marine water
13		1	1	1	1	Sewage and fishy smell	Marine water and exposed shores
14		1	1	1	1	Sewage and fishy smell	Marine water and exposed shores
15		1	1	0	0	Sewage and fishy smell	Marine water
16		0	0	0	0	N/A	N/A
17		0	0	0	0	N/A	N/A
18		0	0	0	0	N/A	N/A
19		1	1	0	0	Fishy smell	Marine water
20		0	0	0	0	N/A	N/A

21	Southern Kai Tak Approach Channel	0	0	0	0	N/A	N/A
22		0	0	0	0	N/A	N/A
23		0	0	0	0	N/A	N/A
24		0	0	0	0	N/A	N/A
25		0	0	0	0	N/A	N/A
26		0	0	0	0	N/A	N/A
27	Kai Tak Runway	0	0	0	0	N/A	N/A
28		0	0	0	0	N/A	N/A
29		0	0	0	0	N/A	N/A
30		0	0	0	0	N/A	N/A
31		0	0	0	0	N/A	N/A
32		0	0	0	0	N/A	N/A
33		0	0	0	0	N/A	N/A
34		0	0	0	0	N/A	N/A
35		0	0	0	0	N/A	N/A
36	Ma Tau Kok/To Kwan Wan waterfront	1	1	0	0	Engine oil	Floating oil
37		0	0	0	0	N/A	N/A
38		0	0	0	0	N/A	N/A
39		1	1	0	0	Sewage	Marine water
40		1	1	1	1	Sewage	Marine water
41	Upstream section of Kai Tak Nullah	0	0	0	0	N/A	N/A
42		1	1	1	1	Sewage	Water at Kai Tak Nullah
43		1	1	0	0	Sewage	Water at Kai Tak Nullah
44		0	0	0	0	N/A	N/A
45	Downstream section of Kai Tak Nullah	0	0	0	0	N/A	N/A
46		0	0	0	0	N/A	N/A
47		1	1	1	1	Sewage	Water at Kai Tak Nullah
48		1	1	1	1	Sewage	Water at Kai Tak Nullah
49		0	0	1	1	Sewage	Water at Kai Tak Nullah
50		1	1	0	0	Sewage	Water at Kai Tak Nullah

51		1	1	1	1	Sewage	Water at Kai Tak Nullah
52		0	0	0	0	N/A	N/A
53		1	1	1	1	Sewage	Water at Kai Tak Nullah
54		0	0	0	0	N/A	N/A
55		0	0	0	0	N/A	N/A
56		0	0	0	0	N/A	N/A
57	Upstream section of Kai Tak Nullah	0	0	0	0	N/A	N/A
58		0	0	0	0	N/A	N/A
59		1	1	1	1	Sewage	Water at Kai Tak Nullah
60		0	0	0	0	N/A	N/A
A1	Kwun Tong Typhoon Shelter	0	0	1	1	Fishy smell	Sewage treatment plant
A2		0	0	0	0	N/A	N/A
A3		0	0	1	1	Fishy smell	Sewage treatment plant
A4		0	0	0	0	N/A	N/A
A5		0	0	0	0	N/A	N/A

5. Sediment monitoring

Monitoring Locations

5.1 Thirteen monitoring stations are proposed for the sediment monitoring. The locations are also summarized in Table 5.1 and shown on **Figure 2**.

Table 5.1 Sediment Monitoring Stations

Location ID	Sampling Location	Coordinates	
		Easting	Northing
SA1	Northern KTAC, in the vicinity of Kai Tak Nullah (KTN)	838744.13	820311.91
SA2	Northern KTAC	838840.95	820030.07
SA3	Northern KTAC, in the vicinity of Jordan Valley Culvert (JVC) Outfall	839163.99	819942.90
SA4	Southern KTAC	839407.66	819537.90
SA5		839580.35	819512.47
SA6		839647.87	819329.45
SA7	KTTS	840122.60	819275.72
SA8		840270.71	819015.35
SA9		840479.55	818798.14
SA10	Kowloon Bay (between runway opening and TKWTS)	838694.90	819582.08
SA11	MTK waterfront, at the end of Ma Tau Kok Road	838138.20	820038.77
SA12	TKW waterfront, near Vehicle Examination Centre	837892.97	819704.84
SA13	Hoi Sham Park waterfront	837857.15	819436.94

Monitoring Parameters and Frequency

5.2 Table 5.2 summarizes the monitoring parameters and frequencies of the sediment monitoring.

Table 5.2 Sediment Monitoring Parameters and Frequency

Monitoring Stations	Parameters, unit	Frequency
SA1 SA2 SA3 SA4 SA5 SA6 SA7 SA8 SA9 SA10 SA11 SA12 SA13	**Laboratory Testing:** • Acid Volatile Sulphides (AVS), (mg/kg dry weight) • Residual Nitrate, (mg NO_3-N/L wet weight) • Reduction – Oxidation (Redox) Potential, (mV)/pH	• Half-yearly

Sampling Procedure

5.3 A hand held differential Global Positioning System (GPS) shall be used during the sediment monitoring to ensure the sampling and monitoring are at the correct location. The depth of water, in metres below the Principal datum (mPD), shall be measured.

5.4 At each designated monitoring station, the undisturbed surface sediment core samples shall be collected by manual or gravity pushing the corer into the sediment. Care shall be taken in collecting the core to prevent contact with air or excessive mixing of the sample. The core shall be at least 0.8m in length. Core recovery shall be at least 60% and the core shall be immediately sealed after collection to prevent leakage of odour and liquids. Care shall be taken in sealing the core in order to prevent any gas leakage and to minimize the amount of air inside the core.

5.5 The core shall be properly labeled with information such as sampling ID, sample length, diameter and depth as well as sampling date and time.

Decontamination Procedures

5.6 Sampling equipment used during the course of the investigation programme shall be decontaminated by manual washing and fresh water rinsing after each sampling event. All disposable equipment was discarded after each use.

Method of Sample Handling Storage and Transportation

5.7 The core samples shall be immediately stored, transported and maintained at 4°C or lower without being frozen in dark prior to any laboratory testing. All core samples shall be packed and transported in such a manner as to avoid shock, vibration or any

other disturbance of the samples. Core samples shall be delivered to Wellab Ltd. (HOKLAS Registration No.083) after collection on the same day. All samples shall be handled under chain of custody protocols, delivered to Wellab Ltd.

Details of Testing

5.8 The collected sediment core samples with diameter of 100mm (from top to approximately 10cm in depth) shall be tested. The reporting limit, preparation method, determination method and the parameters to be tested are shown in Table 5.3.

Table 5.3 Testing Parameters, Reporting Limit and Analytical Method

Parameters, unit	Reporting Limit	Preparation Method USEPA Method	Determination Method USEPA Method
Acid Volatile Sulphides (mg/kg dry weight)	1	N/A	Draft Analytical Method for Determination of Acid Volatile Sulfide in Sediment. Office of Water Regulations and Standards (1991), (USEPA 821-R-91-100)
Redox (mV)	1	N/A	WTW pH/redox meter (or equivalent) calibrated to ISO9002 Standards
pH	0.1	N/A	
Residual Nitrate (mg NO_3-N/L wet weight)	0.05	N/A	APHA 4500 NO_3-E and 4500 NO_2-B

QA/QC Requirements

5.9 All laboratory tests will be conducted by laboratory accredited by Hong Kong Laboratory Accreditation Scheme (HOKLAS) - Wellab Ltd. (HOKLAS Registration No.083).

5.10 The following quality control programme shall be performed for laboratory testing:

- ✧ Method blank;
- ✧ Duplicate (at 5% level i.e. one for every 20 samples); and
- ✧ Matrix Spike (at 5% level i.e. one for every 20 samples).

Quality Controls	Acceptance Criteria
Method Blank	Less than method detection limit (MDL)
Duplicate	Confine within $\pm$ 25% of the mean of duplicated results
Matrix Spike	Confine within $\pm$ 25% of the recovery of spike concentration

Monitoring Equipment

Water Depth Detector

5.11 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station.

Position System

5.12 A hand held differential Global Positioning System (GPS) shall be used during sediment monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

Results and Observation

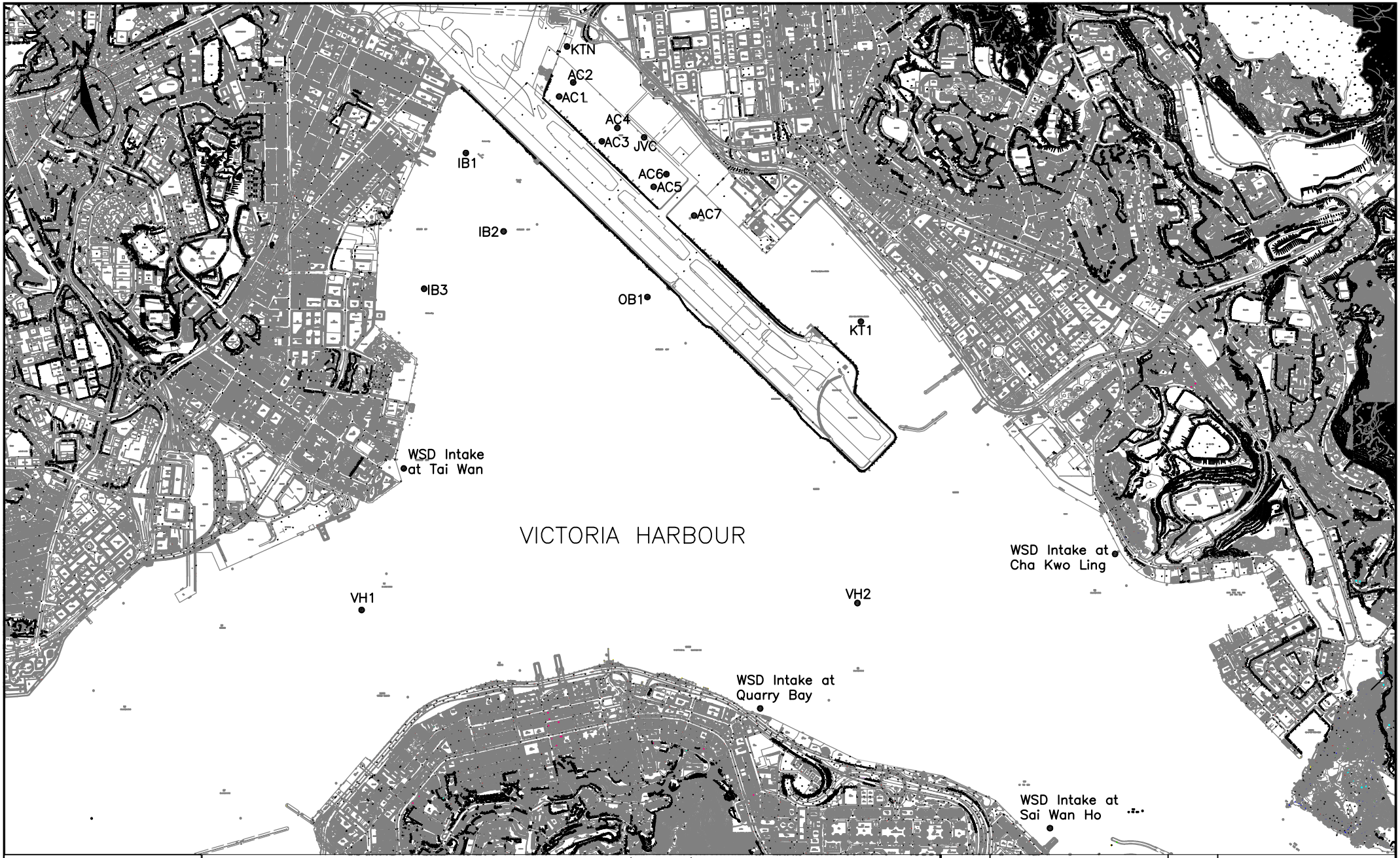
5.13 No sediment monitoring was conducted in the reporting period. The last sediment monitoring was conducted in August 2014. The next monitoring will be carried out in February 2015.

6. Conclusion

6.1 Environmental monitoring works for odour patrol were performed in September 2014 and all monitoring results were checked and reviewed.

6.2 The next general water quality monitoring and odour patrol will be conducted in November 2014 while the next sediment monitoring and odour sampling will be conducted in February 2015.

FIGURES



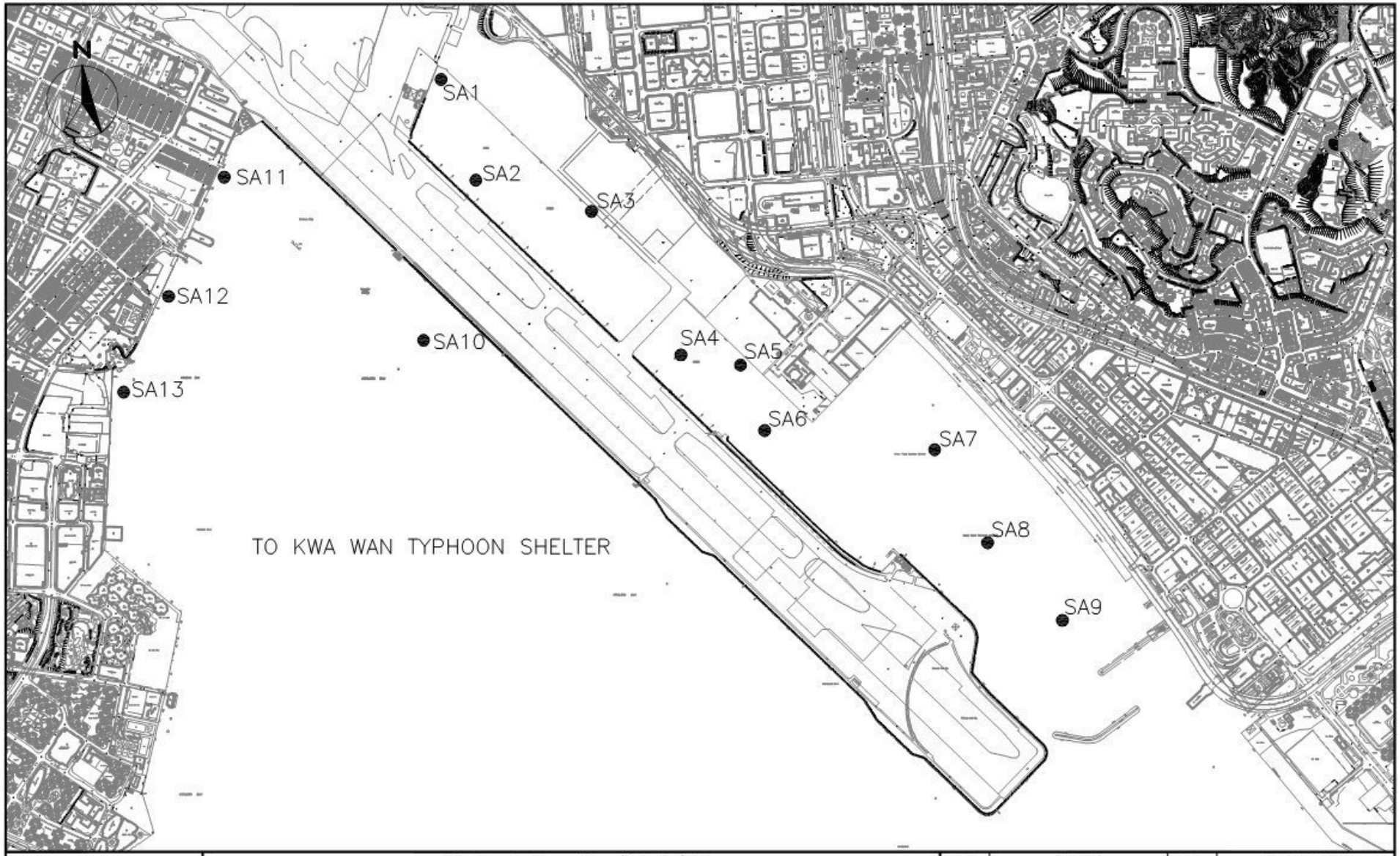
CINOTECH consultants limited

Contract No. KL/2010/02

Kai Tak Development – Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works (Phase 1)

Location Of Water Quality Monitoring Stations

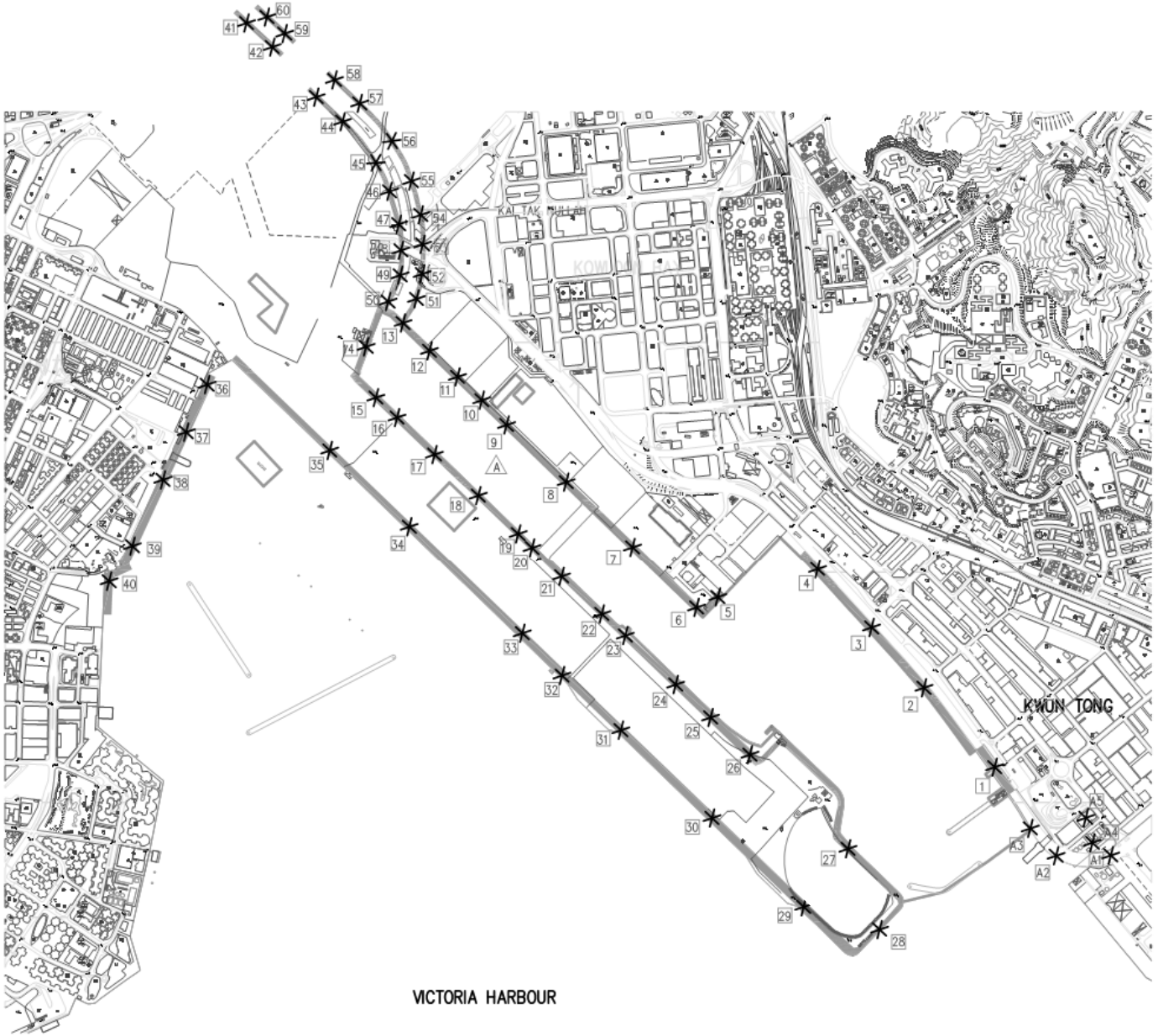
SCALE	N.T.S	DATE	3 AUG 2011
CHECK	IT	DRAWN	TW
PROJECT NO.	MA11017	FIGURE NO. 1	REV –



CINOTECH
Cinotech Consultants Limited

Contract No. KL /2010/02
Kai Tak Development – Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works (Phase 1)
Location of Odour Sampling and Sediment Monitoring Stations

SCALE	N.T.S.	DATE	AUG 2011	
CHECK	IT	DRAWN	TW	
JOB No.	MA11017	FIGURE NO.	FIG 2	REV –



Contract No. KL/2010/02 Kai Tak Development-Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (Phase 1)	Scale N.T.S	Project No. MA11017	CINOTECH
Proposed Odour Patrol Route and Sniffing Locations	Date Nov-13	Figure 3	

APPENDIX A
COPIES OF CALIBRATION CERTIFICATES FOR ODOUR PATROL

WELLAB LIMITED
Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

ATTN: **Mr. W.K. Tang**

Test Report No.:	CA/140503
Date of Issue:	2014-05-04
Date Received:	2014-05-03
Date Tested:	2014-05-03
Date Completed:	2014-05-04
Next Due Date:	2015-05-03
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: Thermo Anemometer
Manufacturer	: Prova Instruments Inc.
Model No.	: AVM-01
Serial No.	:10330172
Equipment No.	: A-03-06

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 68%
Pressure	: 101.0 kPa

Methodology:

The anemometer has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

	Reference Set Point	Instrument Readings
Measuring Air Velocity, m/s	2.0	2.0
Temperature, °C	21.0	21.1

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Laboratory Manager

APPENDIX B
CERTIFICATES FOR QUALIFIED PANEL MEMBER

WELLAB 匯力
Testing & Research

WELLAB LIMITED
Rms 1516, 1701 & 1716, Technology Park,
18 On Lai Street, Shatin, N.T., Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	20542
Date of Issue:	2014-07-16
Date Tested:	2014-07-11
Date Completed:	2014-07-16

ATTN: **Ms Ivy Tam** Page: 1 of 1

Certificate of Qualified Odour Panel Member

Mr. Tang Wing-Kwai

Test Requested & Methodology:
An odour screening test was conducted for odour panel applicants at Wellab Ltd. to determine the thresholds of odour panel candidate according to the requirement of European Standard Method (EN13725). Standard n-butanol gas with a certified concentration of 50 ppm/v was applied as reference material and the n-butanol thresholds in the range of 20 to 80 ppb/v was determined by the olfactomery measurements on three separate sessions on 11th, 14th and 16th July 2014, respectively.

Results:

Standard deviation of n-butanol thresholds in the range of 20 to 80 ppb/v, R	Requirement of EN13725	Comment
1.34	<2.3	Pass

Certification:
This is to certify that **Mr. Tang Wing-Kwai** participated in a set of n-butanol screening tests in our laboratory in July 2014 and the odour threshold of n-butanol in nitrogen gas was found to be in the range of 20 – 80 ppb/v with a standard deviation of R is 1.34. According to the requirement of the European Standard Method of Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725), he is qualified to participate in olfactometry analysis to determine odour concentration for a valid period of six months until 16th January 2015.

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Laboratory Manager

WELLAB 匯力 Testing & Research

WELLAB LIMITED
Rms 1516, 1701 & 1716, Technology Park,
18 On Lai Street, Shatin, N.T., Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	20542A
Date of Issue:	2014-07-16
Date Tested:	2014-07-11
Date Completed:	2014-07-16

ATTN: **Ms Ivy Tam** Page: 1 of 1

Certificate of Qualified Odour Panel Member

Mr. Lee Man-Hei

Test Requested & Methodology:
An odour screening test was conducted for odour panel applicants at Wellab Ltd. to determine the thresholds of odour panel candidate according to the requirement of European Standard Method (EN13725). Standard n-butanol gas with a certified concentration of 50 ppm/v was applied as reference material and the n-butanol thresholds in the range of 20 to 80 ppb/v was determined by the olfactomery measurements on three separate sessions on 11th, 14th and 16th July 2014, respectively.

Results:

Standard deviation of n-butanol thresholds in the range of 20 to 80 ppb/v, R	Requirement of EN13725	Comment
1.26	<2.3	Pass

Certification:
This is to certify that **Mr. Lee Man-Hei** participated in a set of n-butanol screening tests in our laboratory in July 2014 and the odour threshold of n-butanol in nitrogen gas was found to be in the range of 20 – 80 ppb/v with a standard deviation of R is 1.26. According to the requirement of the European Standard Method of Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725), he is qualified to participate in olfactometry analysis to determine odour concentration for a valid period of six months until 16th January 2015.

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Laboratory Manager

APPENDIX C
ENVIRONMENTAL MONITORING SCHEDULE

Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works (Phase 1)
Odour Patrol Schedule for September 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep
7-Sep	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep
			Odour Patrol Daytime - High Tide Evening/Night Time - Low Tide	Odour Patrol Daytime - High Tide Evening/Night Time - Low Tide		
14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep
21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep
			Odour Patrol Evening/Night Time - Low Tide	Odour Patrol Evening/Night Time - Low Tide	Odour Patrol Evening/Night Time - Low Tide	
28-Sep	29-Sep	30-Sep				

Remark: Reference was made to the tidal information of Hong Kong Observatory

APPENDIX D
RESULS FOR ODOUR PATROL SURVEY IN SEPTEMBER 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
1	10:18	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~	0.0	(2)
2	10:24	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	0.3	(2)
3	10:34	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	0.4	(2)
4	10:39	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	2.7	(2)
5	10:48	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	1.1	(2)
6	10:50	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.2	(2)
7	13:00	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	marine water	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	5.1	(2)
8	11:00	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.9	(2)
9	11:02	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.5	(2)
10	11:04	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	3.2	(2)
11	11:05	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	3.2	(2)
12	11:06	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	2.8	(2)
13	11:24	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage and fishy smell	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	4.0	(2)
14	11:22	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage and fishy smell	marine water	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	4.2	(2)
15	11:20	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	marine water	Intermittent / ~~Continuous~~	~~Downwind~~ / Upwind (S)	1.3	(2)
16	11:18	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	3.3	(2)
17	11:16	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.5	(2)
18	11:14	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	0.5	(2)
19	11:12	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	marine water	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	0.7	(2)
20	10:40	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.5	(3)

#Note: Odour Intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
21	12:53	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	3.9	(2)
22	12:40	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	3.7	(2)
23	12:39	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	4.3	(2)
24	12:37	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	4.1	(2)
25	12:35	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / Upwind (SE)	2.9	(2)
26	12:32	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / Upwind (SE)	2.2	(2)
27	11:57	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	2.8	(2)
28	11:51	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	2.3	(2)
29	12:16	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	2.9	(2)
30	12:11	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	0.4	(2)
31	10:31	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	~~Downwind~~ / Upwind (E)	0.6	(3)
32	10:26	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.5	(3)
33	10:37	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.0	(3)
34	10:53	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.8	(3)
35	10:56	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.6	(3)
36	10:02	High Tide / ~~Low Tide~~	Sunny / (Fine) / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	engine oil	floating oil	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.9	(3)
37	09:39	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	~~Downwind~~ / ~~Upwind~~	0.0	(3)
38	09:41	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	0.9	(3)
39	09:49	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	3.6	(3)
40	09:51	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.6	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
41	12:13	High Tide / ~~Low Tide~~	Sunny / Fine / ~~Cloudy~~ / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~ (N/A)	0.0	(3)
42	12:05	High Tide / ~~Low Tide~~	Sunny / Fine / ~~Cloudy~~ / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	4.4	(3)
43	11:56	High Tide / ~~Low Tide~~	Sunny / Fine / ~~Cloudy~~ / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	1.9	(3)
44	11:54	High Tide / ~~Low Tide~~	Sunny / Fine / ~~Cloudy~~ / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (NE)	1.1	(3)
45	11:37	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	1.6	(3)
46	11:30	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (N)	0.2	(3)
47	11:29	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	1.1	(3)
48	11:18	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (NE)	1.3	(3)
49	11:10	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.6	(3)
50	11:08	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.3	(3)
51	11:06	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.7	(3)
52	11:12	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.1	(3)
53	11:19	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (NE)	2.8	(3)
54	11:22	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.9	(3)
55	11:33	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (N)	1.1	(3)
56	11:40	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	1.1	(3)
57	11:48	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	1.3	(3)
58	11:45	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	2.1	(3)
59	12:06	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	3.9	(3)
60	12:14	High Tide / ~~Low Tide~~	~~Sunny~~ / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	1.9	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

	Name	Signature
Conducted by:	Tang Wing Kwai	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
A1	10:07	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.2	(2)
A2	09:59	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
A3	09:56	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
A4	09:38	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.7	(2)
A5	09:50	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.7	(2)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
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****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

	Name	Signature
Conducted by:	Tang Wing Kwai	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and
Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
1	10:18	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~	0.0	(2)
2	10:24	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	0.3	(2)
3	10:34	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	0.4	(2)
4	10:39	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	2.7	(2)
5	10:48	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(SE)	1.1	(2)
6	10:50	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	1.2	(2)
7	13:00	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~-(SE)	5.1	(2)
8	11:00	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	1.9	(2)
9	11:02	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~-(S)	0.5	(2)
10	11:04	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	3.2	(2)
11	11:05	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~-(S)	3.2	(2)
12	11:06	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~-(S)	2.8	(2)
13	11:24	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage and fishy smell	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~-(SE)	4.0	(2)
14	11:22	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage and fishy smell	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~-(E)	4.2	(2)
15	11:20	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage and fishy smell	marine water	Intermittent / ~~Continuous~~	~~Downwind~~ / Upwind (S)	1.3	(2)
16	11:18	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	3.3	(2)
17	11:16	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.5	(2)
18	11:14	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	0.5	(2)
19	11:12	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	marine water	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (E)	0.7	(2)
20	10:40	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.5	(3)

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Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
21	12:53	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	3.9	(2)
22	12:40	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	3.7	(2)
23	12:39	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	4.3	(2)
24	12:37	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	4.1	(2)
25	12:35	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	2.9	(2)
26	12:32	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	2.2	(2)
27	11:57	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	2.8	(2)
28	11:51	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	2.3	(2)
29	12:16	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	2.9	(2)
30	12:11	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	0.4	(2)
31	10:31	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	0.6	(3)
32	10:26	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	0.5	(3)
33	10:37	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.0	(3)
34	10:53	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.8	(3)
35	10:56	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	0.6	(3)
36	10:02	High Tide / ~~Low Tide~~	Sunny / (Fine) / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	engine oil	floating oil	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.9	(3)
37	09:39	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / ~~Upwind~~	0.0	(3)
38	09:41	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.9	(3)
39	09:49	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	3.6	(3)
40	09:51	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.6	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
41	12:13	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~ (N/A)	0.0	(3)
42	12:05	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	4.4	(3)
43	11:56	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	1.9	(3)
44	11:54	High Tide / ~~Low Tide~~	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (NE)	1.1	(3)
45	11:37	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	1.6	(3)
46	11:30	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (N)	0.2	(3)
47	11:29	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (E)	1.1	(3)
48	11:18	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (NE)	1.3	(3)
49	11:10	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.6	(3)
50	11:08	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.3	(3)
51	11:06	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.7	(3)
52	11:12	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	2.1	(3)
53	11:19	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (NE)	2.8	(3)
54	11:22	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.9	(3)
55	11:33	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (N)	1.1	(3)
56	11:40	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	1.1	(3)
57	11:48	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	1.3	(3)
58	11:45	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	2.1	(3)
59	12:06	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	3.9	(3)
60	12:14	High Tide / ~~Low Tide~~	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	1.9	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

	Name	Signature
Conducted by:	Lee Man Hei	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10 and 11 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014)(General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
A1	10:07	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.2	(2)
A2	09:59	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
A3	09:56	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
A4	09:38	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.7	(2)
A5	09:50	High Tide / ~~Low Tide~~	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.7	(2)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

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1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
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***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014

	Name		Signature
Conducted by:	Lee Man Hei		
Checked by:	Henry Leung		

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
1	17:15	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
2	17:22	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.5	(2)
3	17:29	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.0	(2)
4	17:34	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.2	(2)
5	17:45	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	2.0	(2)
6	17:47	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.3	(2)
7	17:00	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.0	(4)
8	17:56	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.6	(2)
9	17:58	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	Intermittent / Continuous	Downwind / ~~Upwind~~ (S)	0.5	(2)
10	18:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.1	(2)
11	16:00	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.6	(6)
12	16:02	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.2	(6)
13	16:29	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage	exposed shores	Intermittent / Continuous	Downwind / ~~Upwind~~ (S)	2.2	(6)
14	16:23	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	fishy smell	exposed shores	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.0	(6)
15	16:19	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.2	(6)
16	16:15	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.6	(6)
17	16:12	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.8	(6)
18	16:10	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.8	(6)
19	16:08	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.6	(6)
20	17:13	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / Upwind (S)	0.5	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

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****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / ~~OI-2~~

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
21	16:54	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	1.2	(4)
22	16:44	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	1.5	(4)
23	16:42	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	1.4	(4)
24	16:40	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	1.1	(4)
25	16:38	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	1.1	(4)
26	16:35	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	~~Downwind~~ / Upwind (S)	0.8	(4)
27	16:27	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	2.1	(4)
28	16:23	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	2.9	(4)
29	16:04	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SW)	0.6	(4)
30	16:00	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (SW)	0.8	(4)
31	17:05	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	2.0	(3)
32	17:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.4	(3)
33	17:10	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.6	(3)
34	16:36	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.9	(6)
35	16:40	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.1	(6)
36	16:20	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.3	(5)
37	16:32	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.4	(5)
38	16:35	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.7	(5)
39	16:47	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	1.0	(5)
40	16:50	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.2	(5)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
41	16:59	~~High Tide~~ / Low Tide	Sunny / Fine (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind	0.0	(6)
42	16:52	~~High Tide~~ / Low Tide	Sunny / Fine (Cloudy) / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.2	(6)
43	18:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.4	(3)
44	17:59	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.5	(3)
45	17:45	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.9	(3)
46	17:37	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (SE)	0.5	(3)
47	17:36	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / Continuous	Downwind / ~~Upwind~~ (SE)	0.4	(3)
48	17:23	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / Continuous	~~Downwind~~ / Upwind (S)	1.2	(3)
49	16:44	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.8	(3)
50	16:40	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.5	(3)
51	16:37	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / Continuous	~~Downwind~~ / Upwind (S)	5.0	(3)
52	16:46	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	1.9	(3)
53	17:25	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / Continuous	~~Downwind~~ / Upwind (S)	1.0	(3)
54	17:28	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.7	(3)
55	17:41	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.4	(3)
56	17:48	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (SE)	0.8	(3)
57	17:51	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (E)	0.3	(3)
58	17:54	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (E)	0.4	(3)
59	16:53	~~High Tide~~ / Low Tide	Sunny / Fine (Cloudy) / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.2	(6)
60	17:00	~~High Tide~~ / Low Tide	Sunny / Fine (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (SE)	0.3	(6)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
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4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

	Name	Signature
Conducted by:	Tang Wing Kwai	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: OI-1 / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
A1	16:39	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	fishy smell	sewage treatment plant	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.4	(2)
A2	16:30	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (NE)	3.1	(2)
A3	16:27	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	fishy smell	sewage treatment plant	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.9	(2)
A4	16:19	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~	0	(2)
A5	17:03	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SW)	1.4	(2)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
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3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

	Name	Signature
Conducted by:	Tang Wing Kwai	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
1	17:15	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.1	(2)
2	17:22	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.5	(2)
3	17:29	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.0	(2)
4	17:34	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	1.2	(2)
5	17:45	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	2.0	(2)
6	17:47	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.3	(2)
7	17:00	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.0	(4)
8	17:56	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.6	(2)
9	17:58	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	0.5	(2)
10	18:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.1	(2)
11	16:00	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.6	(6)
12	16:02	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.2	(6)
13	16:29	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	sewage and fishy smell	exposed shores	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (S)	2.2	(6)
14	16:23	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 / (1) / 2 / 3 / 4	fishy smell	exposed shores	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.0	(6)
15	16:19	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.2	(6)
16	16:15	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.6	(6)
17	16:12	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.8	(6)
18	16:10	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.8	(6)
19	16:08	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.6	(6)
20	17:13	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	~~Downwind~~ / Upwind (S)	0.5	(3)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

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1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
21	16:54	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.2	(4)
22	16:44	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.5	(4)
23	16:42	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.4	(4)
24	16:40	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.1	(4)
25	16:38	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.1	(4)
26	16:35	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / Upwind (S)	0.8	(4)
27	16:27	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	2.1	(4)
28	16:23	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	2.9	(4)
29	16:04	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.6	(4)
30	16:00	~~High Tide~~ / Low Tide	Sunny / (Fine) / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SW)	0.8	(4)
31	17:05	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.0	(3)
32	17:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.4	(3)
33	17:10	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.6	(3)
34	16:36	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.9	(6)
35	16:40	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.1	(6)
36	16:20	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	0.3	(5)
37	16:32	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.4	(5)
38	16:35	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.7	(5)
39	16:47	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) / 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.0	(5)
40	16:50	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 / (1) / 2 / 3 / 4	sewage	marine water	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	1.2	(5)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

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Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
41	16:59	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~	0.0	(6)
42	16:52	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / Continuous	Downwind / ~~Upwind~~ (SE)	1.2	(6)
43	16:00	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.4	(3)
44	17:59	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.5	(3)
45	17:45	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SE)	1.9	(3)
46	17:37	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	0.5	(3)
47	17:36	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	Downwind / ~~Upwind~~ (SE)	0.4	(3)
48	17:23	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	~~Downwind~~ / Upwind (S)	1.2	(3)
49	16:44	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (E)	0.8	(3)
50	16:40	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (E)	0.5	(3)
51	16:37	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	~~Downwind~~ / Upwind (S)	5.0	(3)
52	16:46	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (S)	1.9	(3)
53	17:25	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	Intermittent / ~~Continuous~~	~~Downwind~~ / Upwind (S)	1.0	(3)
54	17:28	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SW)	0.7	(3)
55	17:41	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (S)	1.4	(3)
56	17:48	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	0.8	(3)
57	17:51	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	0.3	(3)
58	17:54	~~High Tide~~ / Low Tide	(Sunny) / Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (E)	0.4	(3)
59	16:53	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	0 (1) 2 / 3 / 4	sewage	water at Kai Tak Nullah	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (SE)	1.2	(6)
60	17:00	~~High Tide~~ / Low Tide	Sunny / Fine / (Cloudy) / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind~~ / Upwind (SE)	0.3	(6)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
Remarks: (1) The seawater smell is considered as non-objectionable background smell as quoted in Kai Tak Schedule 3 EIA Report (2) Conducted on 10 September 2014 (3) Conducted on 11 September 2014 (4) Conducted on 24 September 2014 (5) Conducted on 25 September 2014 (6) 26 September 2014

	Name	Signature
Conducted by:	Lee Man Hei	
Checked by:	Henry Leung	

Contract No. KL/2010/02
Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works

Odour Patrol Record Sheet

Odour Intensity Detected by Panel Members: ~~OI-1~~ / OI-2

General Information

Patrol Locations: Within Kai Tak Development and Ma Tau Kok Waterfront
Date: 10, 11, 24, 25 and 26 September 2014
Temperature: 27.5 - 32.9°C (10 September 2014), 27.3 - 33.2°C (11 September 2014) (King's Park)
25.8 - 30.2°C (24 September 2014), 26.1 - 30.4°C (25 September 2014), 25.9 - 31.5 °C (26 September 2014) (King's Park)
Humidity: 59 - 85% (10 September 2014), 60 - 87% (11 September 2014) (General)
67 - 84% (24 September 2014), 66 - 84% (25 September 2014), 67 - 83% (26 September 2014) (General)

Location	Time of Survey	Tidal Condition	Weather Condition	#Odour Intensity	*Odour Characteristics	**Potential Odour Sources	Duration of Odour	Wind Direction	Wind Speed (m/s)	Remarks
A1	16:39	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	sewage treatment plant	~~Intermittent~~ / Continuous	Downwind / Upwind (SW)	0.4	(2)
A2	16:30	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / Upwind (NE)	3.1	(2)
A3	16:27	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	0 (1) 2 / 3 / 4	fishy smell	sewage treatment plant	~~Intermittent~~ / Continuous	Downwind / ~~Upwind~~ (S)	2.9	(2)
A4	16:19	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	~~Downwind / Upwind~~	0	(2)
A5	17:03	~~High Tide~~ / Low Tide	(Sunny) Fine / Cloudy / Rainy	(0) 1 / 2 / 3 / 4	N/A	N/A	~~Intermittent / Continuous~~	Downwind / ~~Upwind~~ (SW)	1.4	(2)

#Note: Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

0 - Not detected. No odour perceived or an odour so weak that it can not be easily characterised or described;
1 - Slight identifiable odour, and slight chance to have odour nuisance;
2 - Moderate identifiable odour, and moderate chance to have odour nuisance;
3 - Strong identifiable, likely to have odour nuisance
4 - Extreme severe odour, and unacceptable odour level.

***Description of Odour Characteristics:** Sewage or rotten-egg smell, decayed vegetables, ammonical, dischargeable odour, putrefaction, sharp, pungent, fish, irritating, fruit, vinegar, etc
****Potential Odour Source:** Exposed sediment, water or sewage; floating debris or material etc
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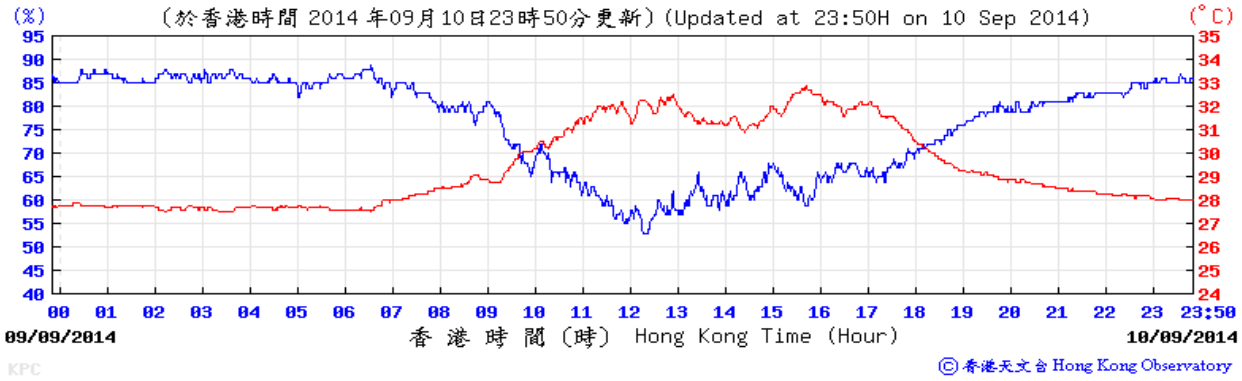
	Name	Signature
Conducted by:	Lee Man Hei	
Checked by:	Henry Leung	

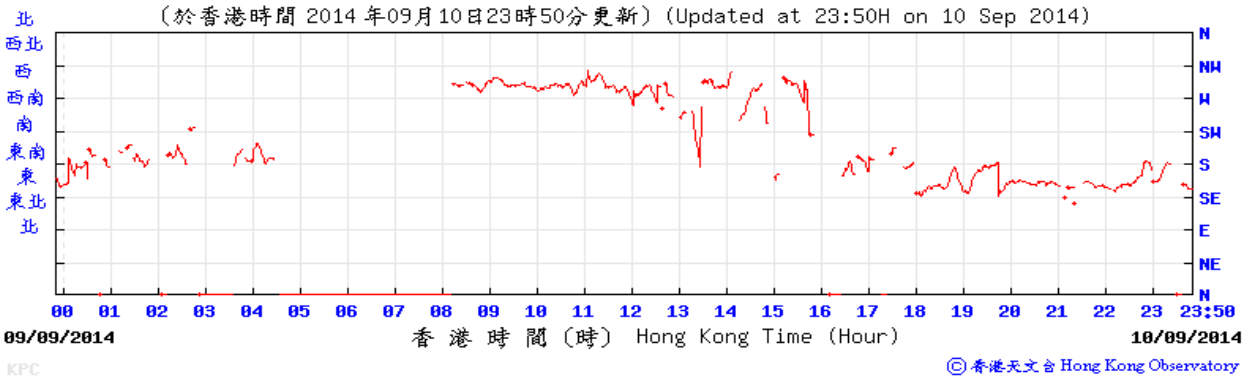
APPENDIX E
METEOROLOGICAL DATA FROM HONG KONG OBSERVATORY STATION DURING ODOUR PATROL

Meteorological Conditions (King's Park)

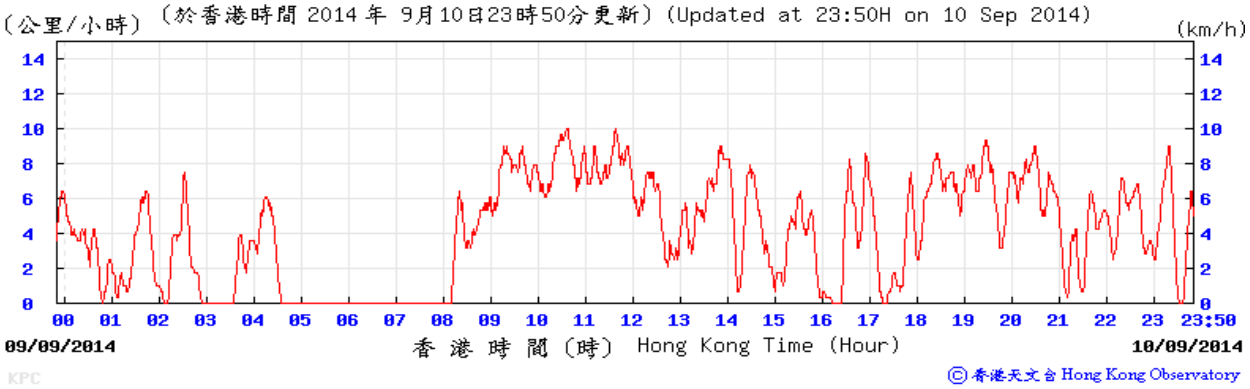
Temperature & Humidity



Wind Direction



Wind Speed

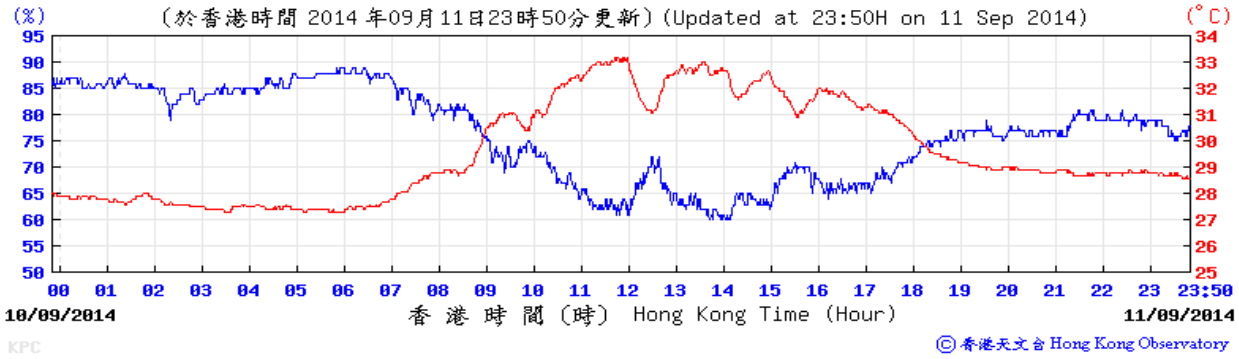


Title	Scale	Project No.
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017
	Date: Sep-14	Appendix: E

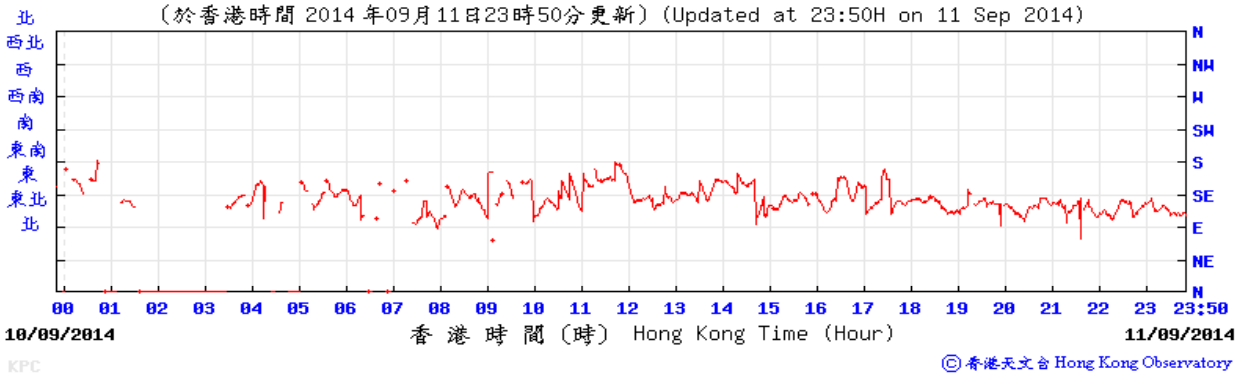
CINOTECH

Meteorological Conditions (King's Park)

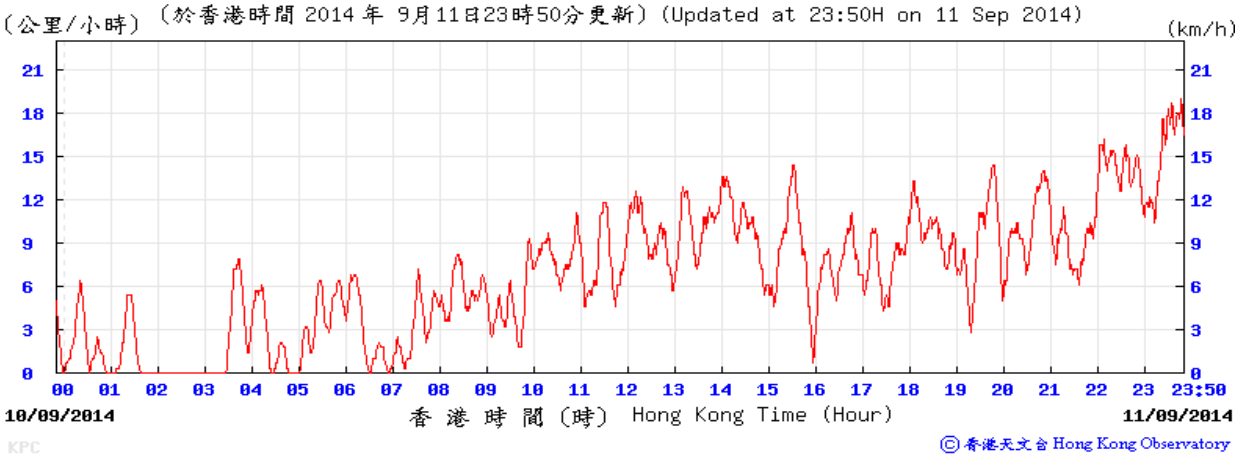
Temperature & Humidity



Wind Direction



Wind Speed

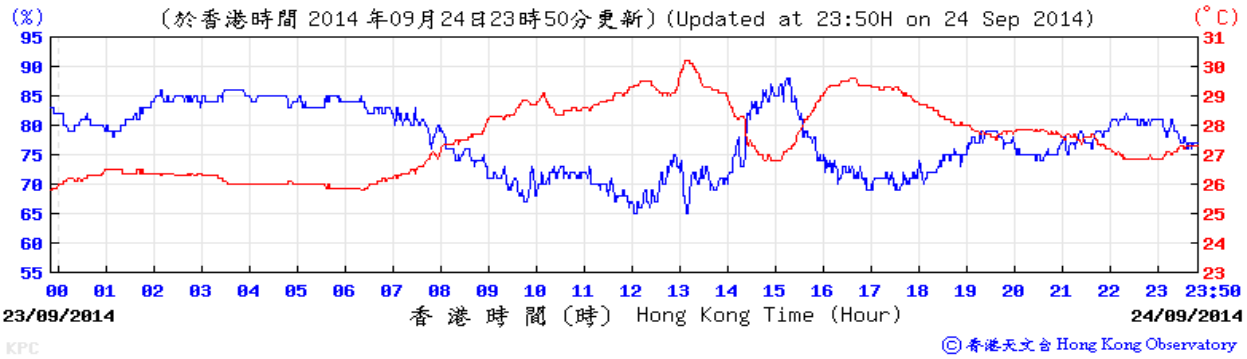


Title	Scale	Project No.
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017
	Date: Sep-14	Appendix: E

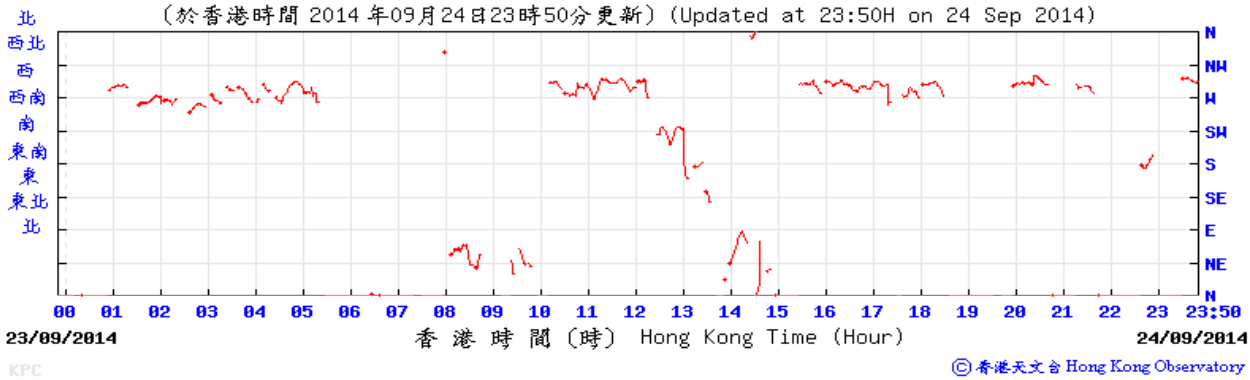
CINOTECH

Meteorological Conditions (King's Park)

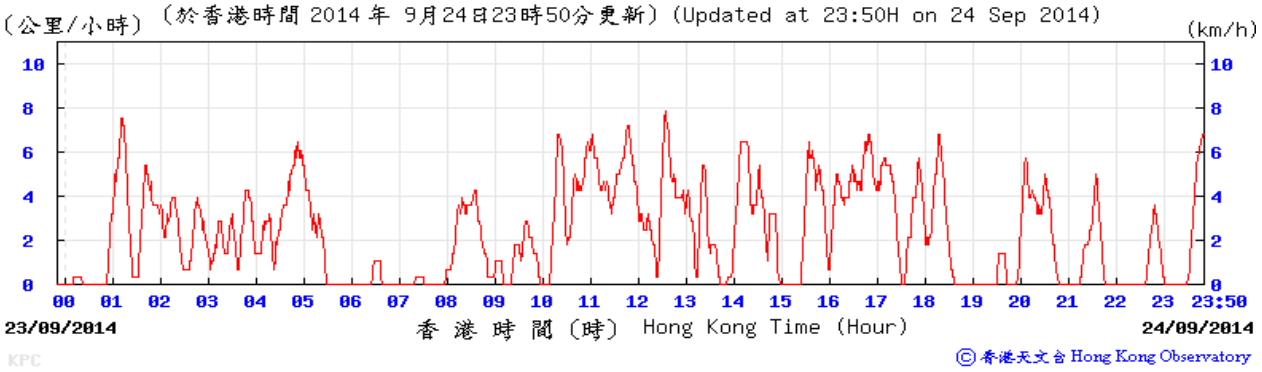
Temperature & Humidity



Wind Direction



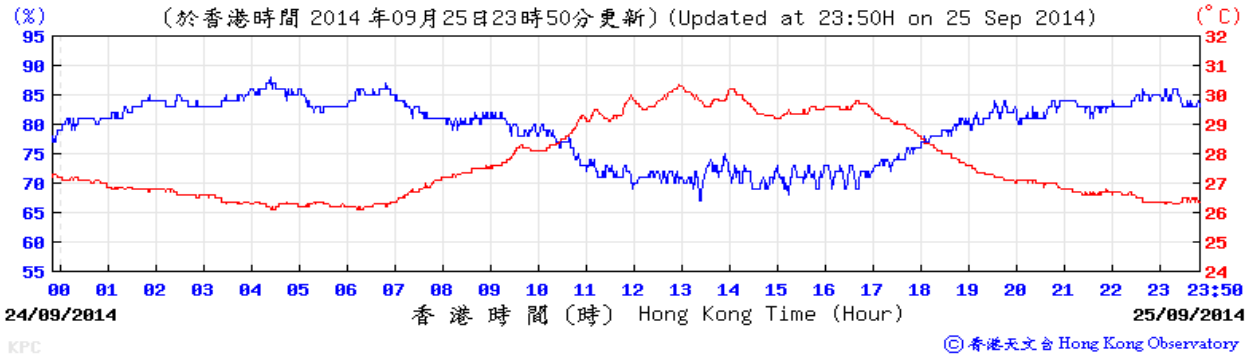
Wind Speed



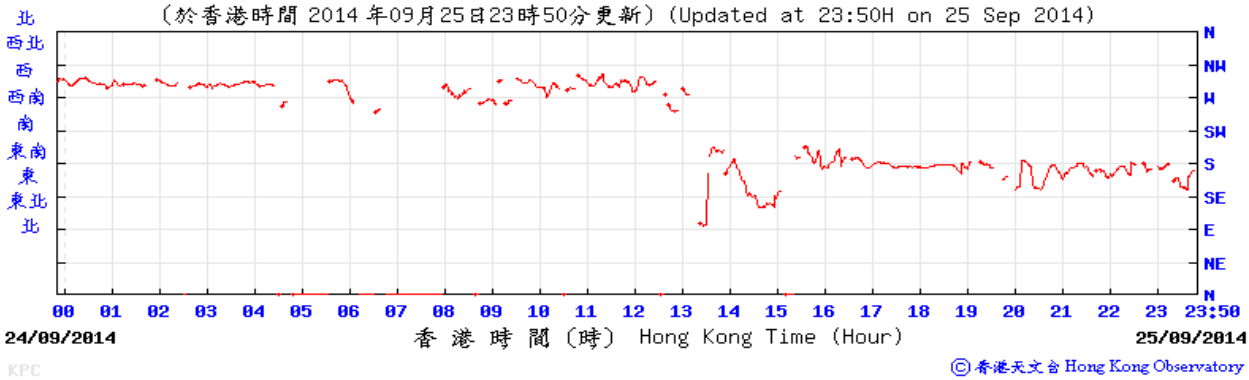
Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date Sep-14	Appendix E	

Meteorological Conditions (King's Park)

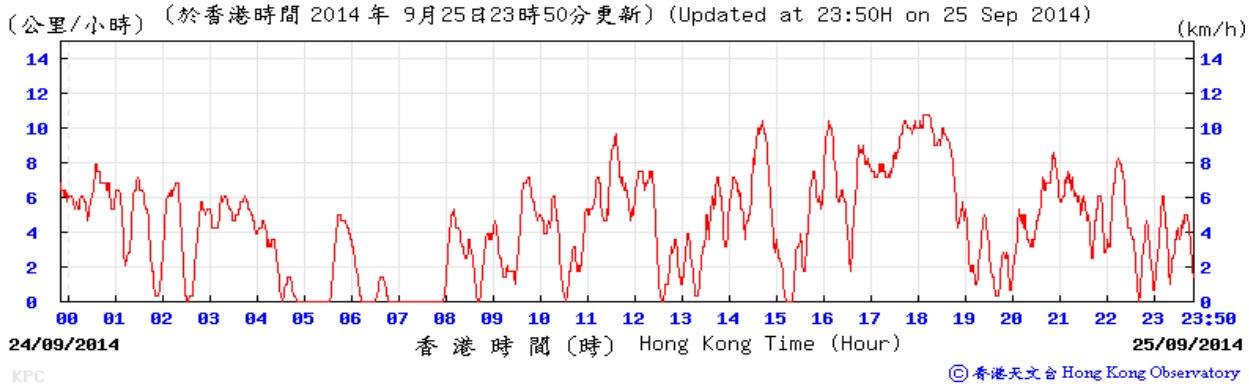
Temperature & Humidity



Wind Direction



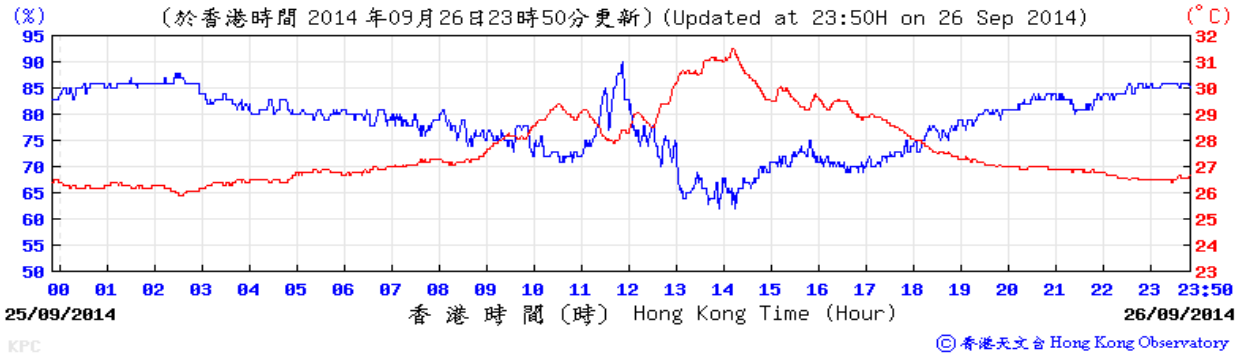
Wind Speed



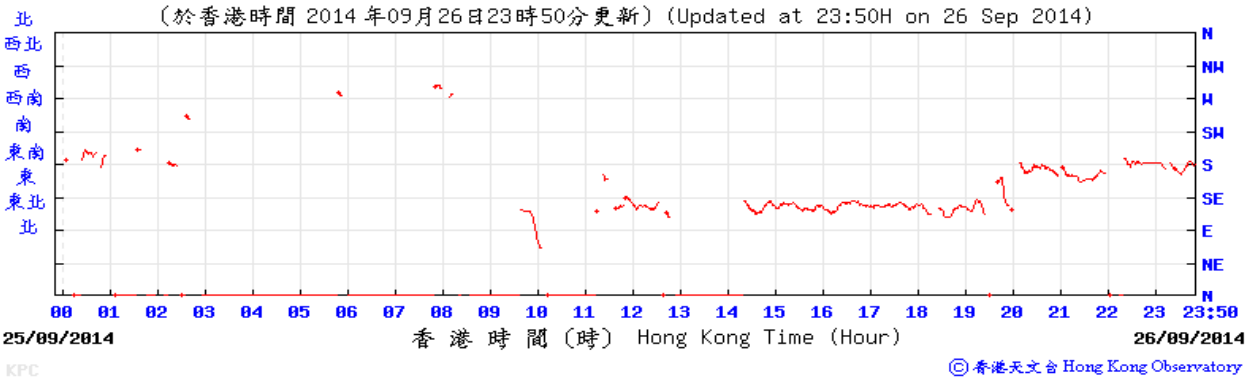
Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date Sep-14	Appendix E	

Meteorological Conditions (King's Park)

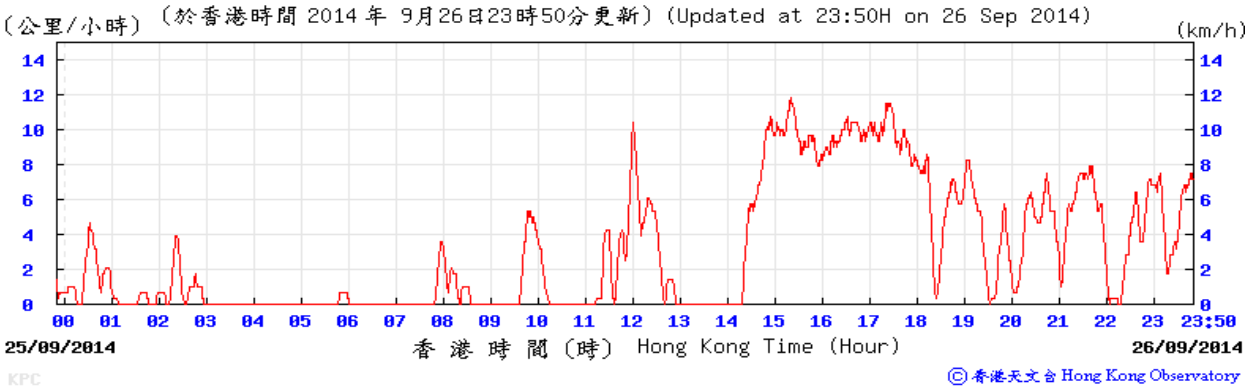
Temperature & Humidity



Wind Direction



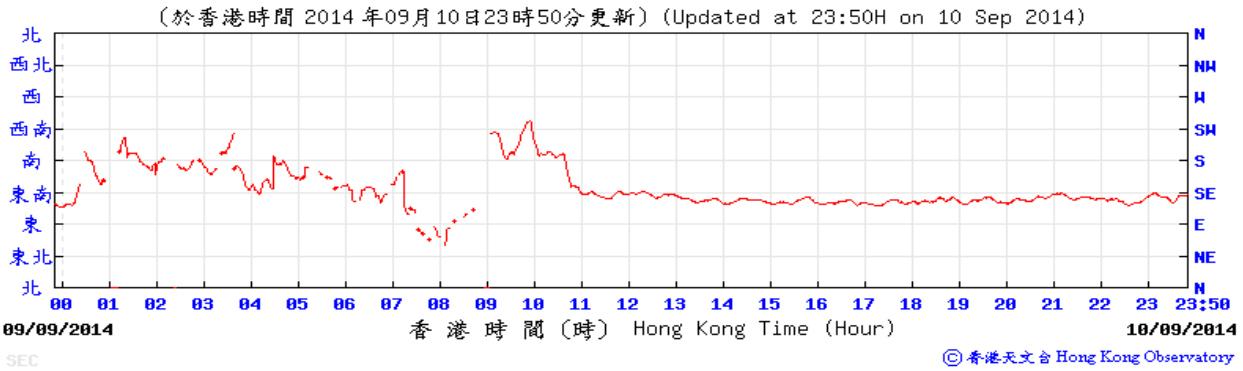
Wind Speed



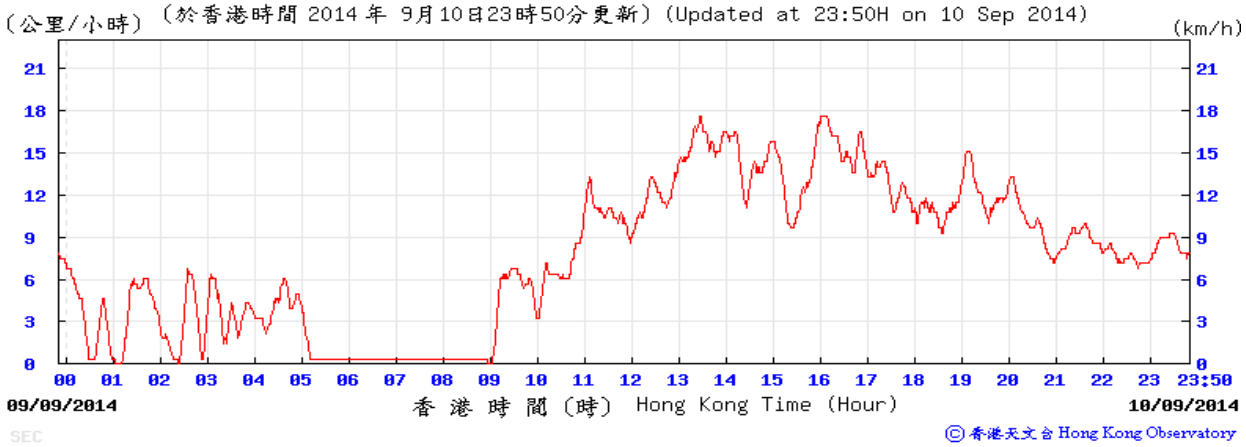
Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date Sep-14	Appendix E	

Meteorological Conditions (Kai Tak)

Wind Direction



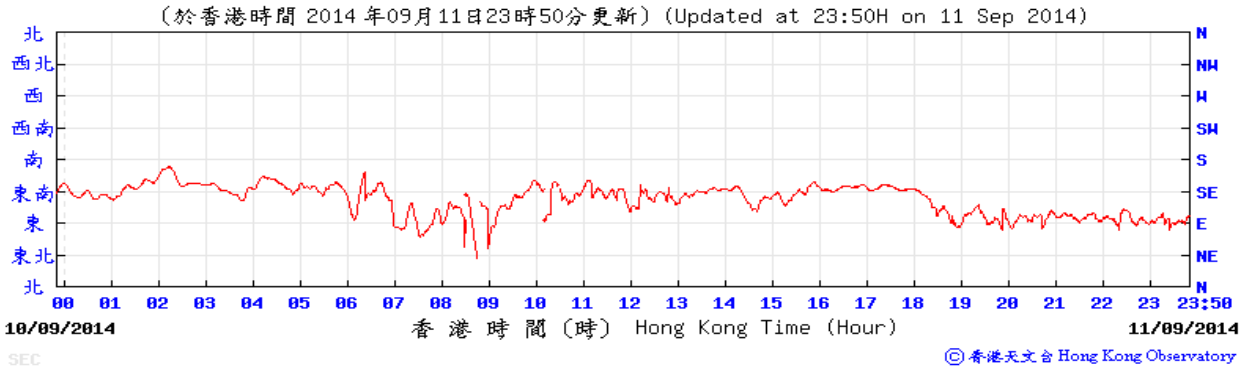
Wind Speed



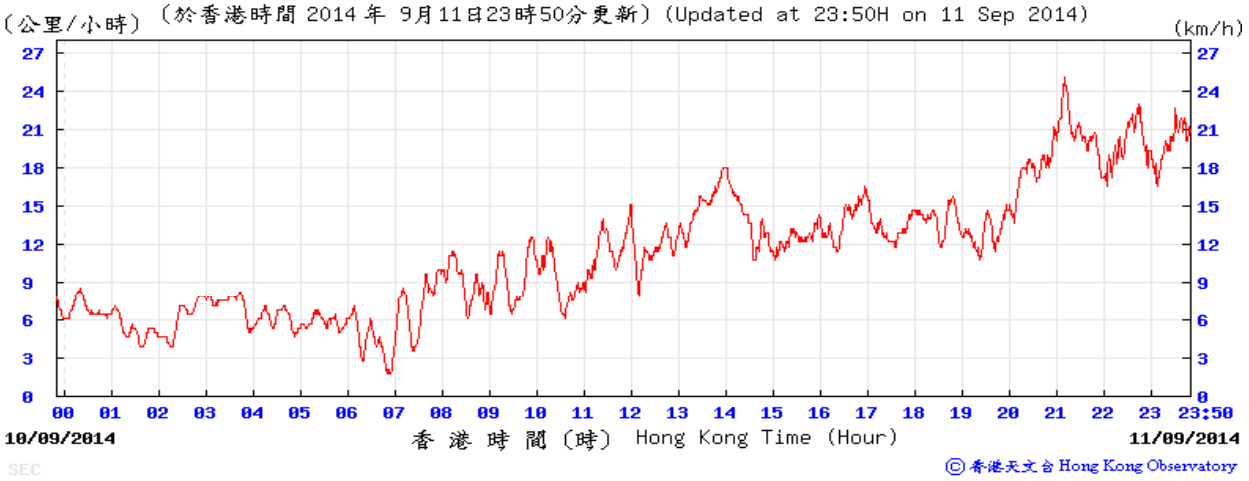
Title: Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	Scale: N.T.S	Project No.: MA11017	CINOTECH
	Date: Sep-14	Appendix: E	

Meteorological Conditions (Kai Tak)

Wind Direction



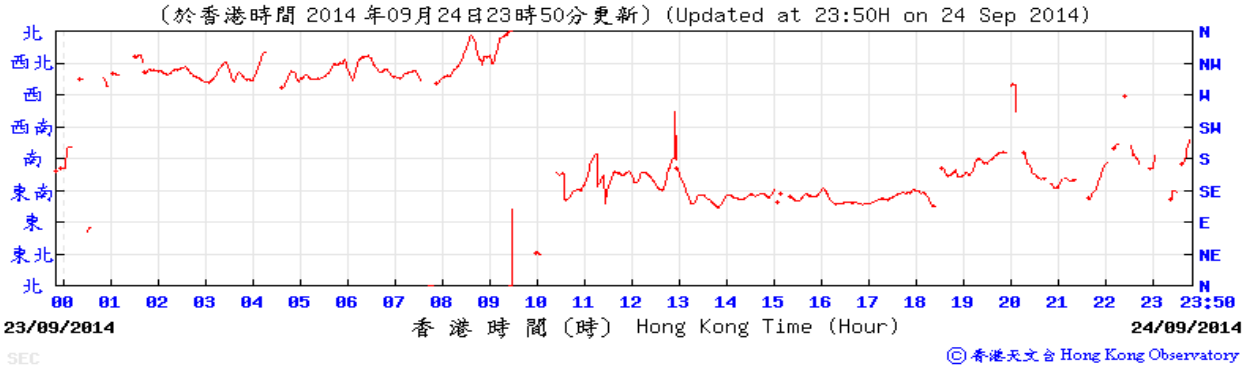
Wind Speed



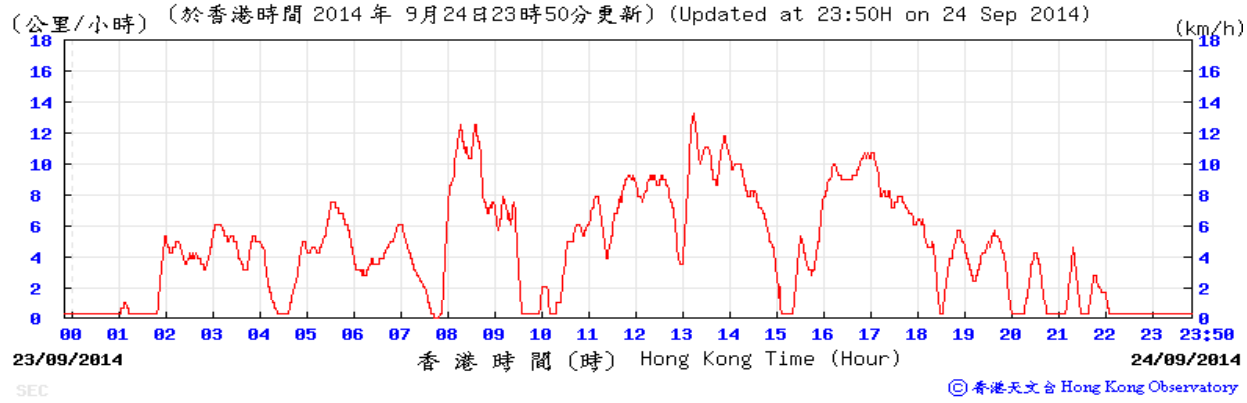
Title: Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	Scale: N.T.S	Project No.: MA11017	CINOTECH
	Date: Sep-14	Appendix: E	

Meteorological Conditions (Kai Tak)

Wind Direction



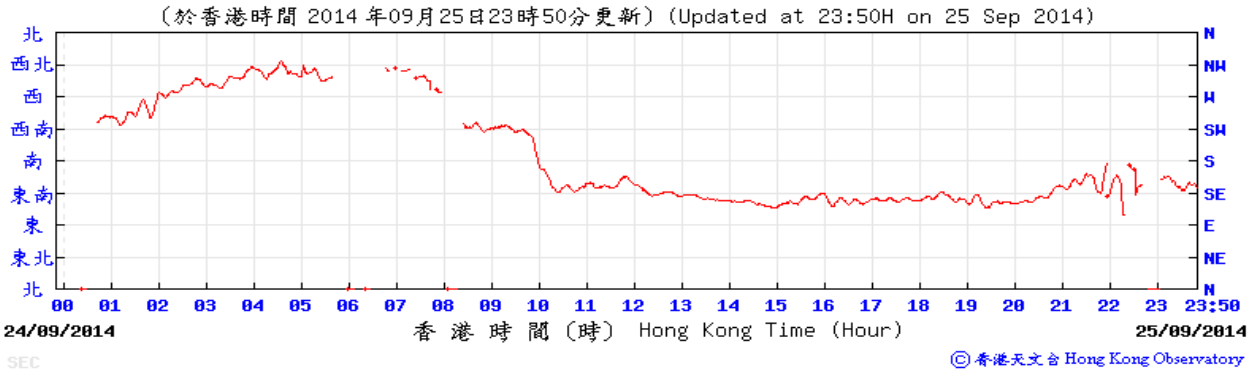
Wind Speed



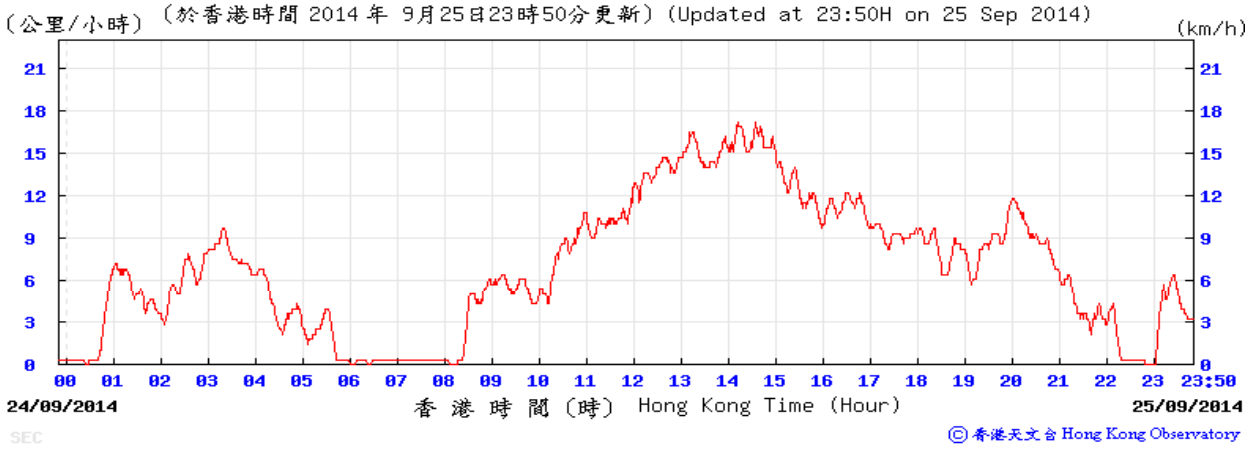
Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date Sep-14	Appendix E	

Meteorological Conditions (Kai Tak)

Wind Direction



Wind Speed



Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
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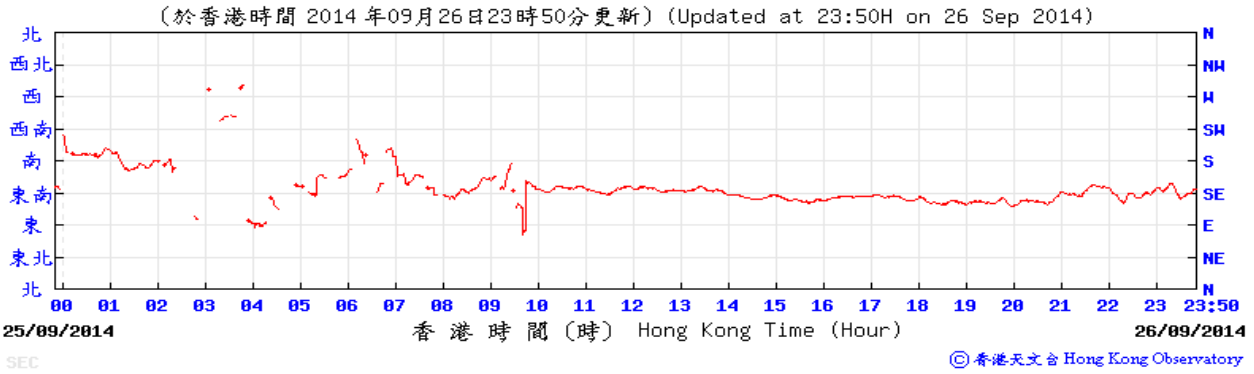
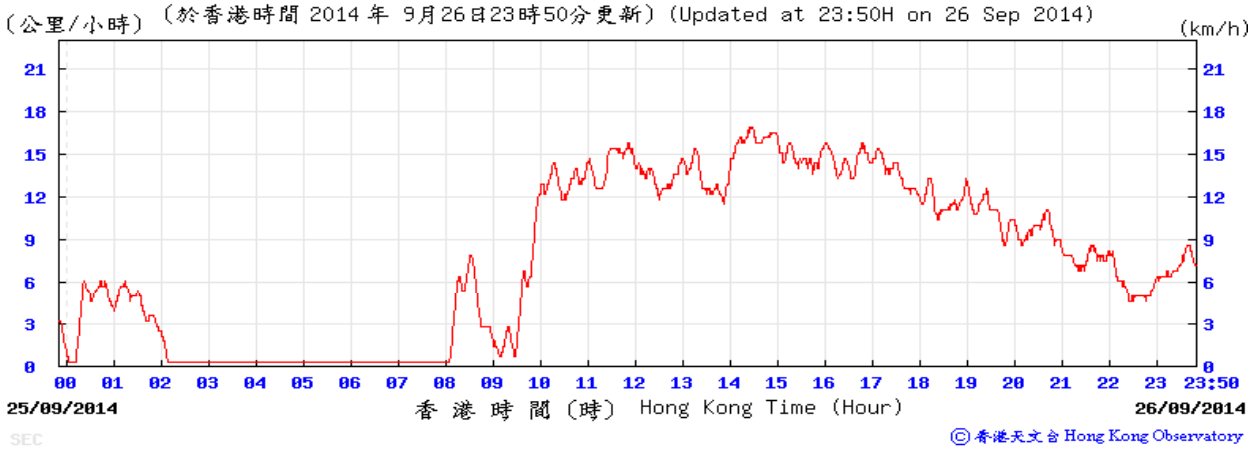
Meteorological Conditions (Kai Tak)

Wind Direction

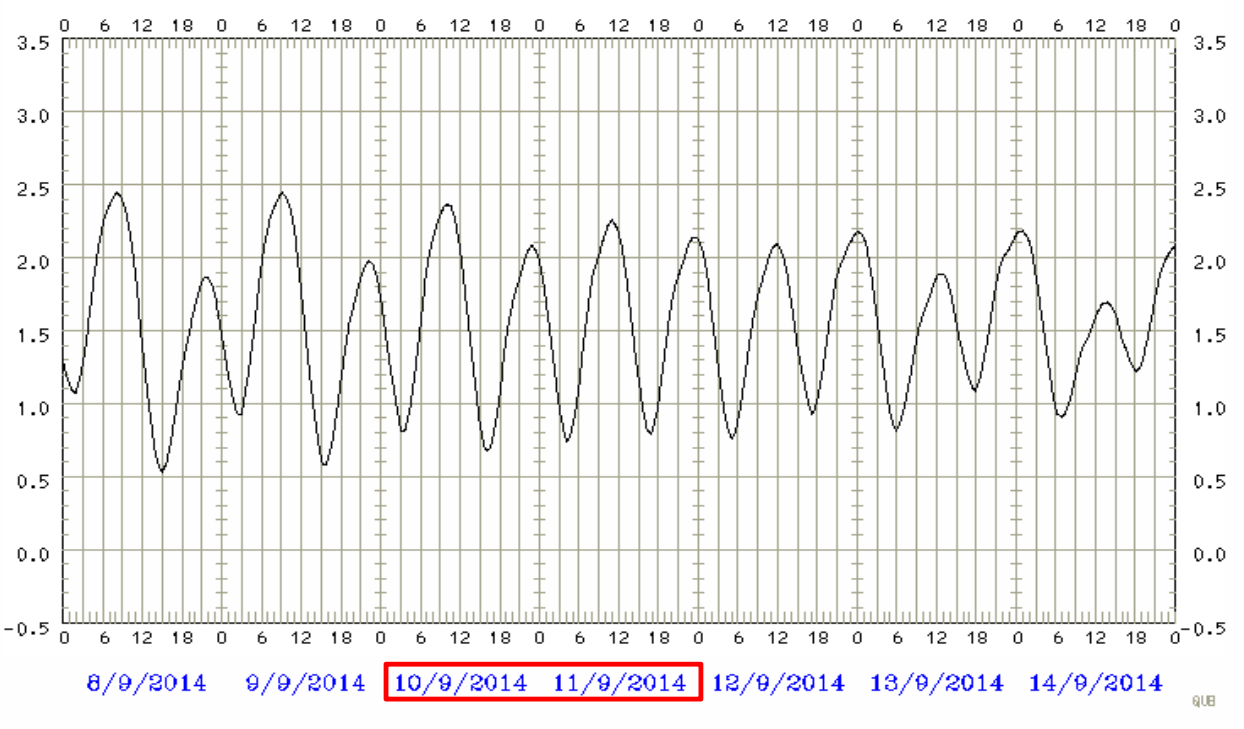


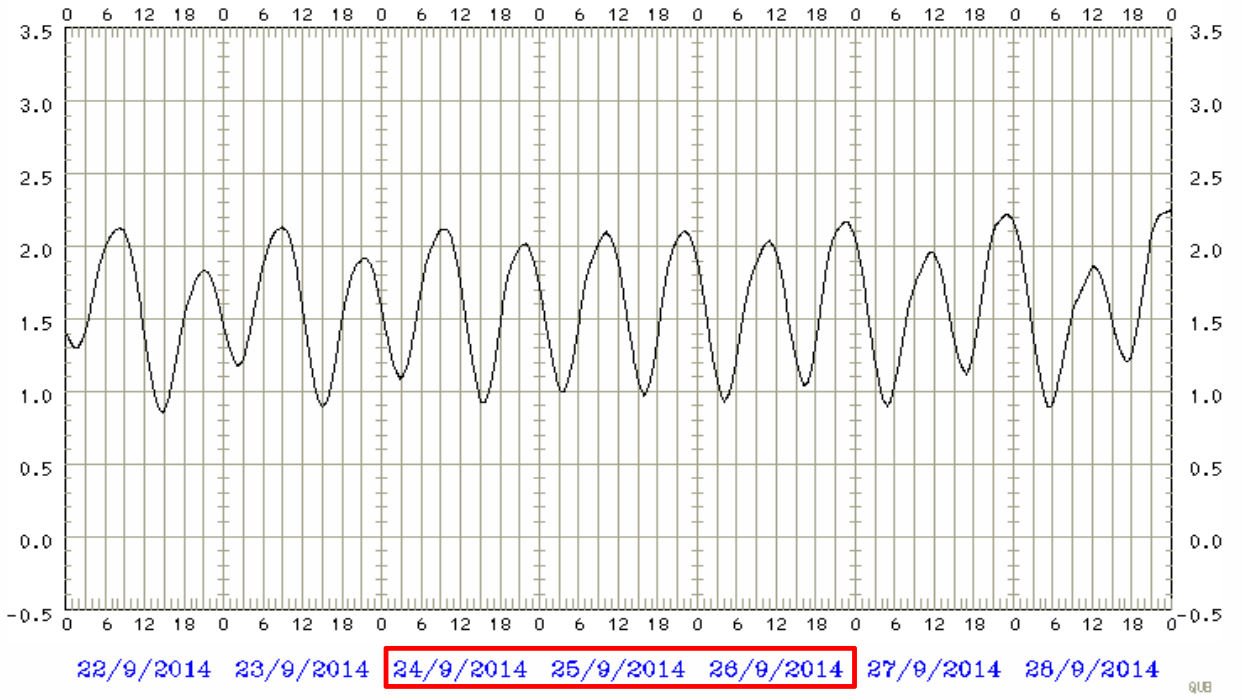
Wind Speed



Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date Sep-14	Appendix E	

Predicted Tides at Quarry Bay in September 2014





Title	Scale	Project No.	
Contract No. KL/2010/02 Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works Meteorological data from Hong Kong Observatory Station	N.T.S	MA11017	CINOTECH
	Date: Sep-14	Appendix: E	