



ANNEX G

ODOUR PATROL RESULT

ALS Technichem (HK) Pty Ltd
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CERTIFICATE OF ANALYSIS

CLIENT:	OSCAR BIOENERGY JOINT VENTURE	WORK ORDER:	HK2432022
CONTACT:	MR LAWRENCE LEE		
ADDRESS:	NO. 5, SHAM FUNG ROAD, SIU HO WAN, NORTH LANTAU ISLAND, NT, HONG KONG	LABORATORY:	HONG KONG
		SUB-BATCH:	0
		DATE OF PATROL:	09 AUGUST 2024
		DATE OF ISSUE:	19 AUGUST 2024
PROJECT:	ODOUR PATROL FOR THE ORGANIC RESOURCES RECOVERY CENTRE PHASE 1 IN SIU HO WAN	SAMPLE TYPE:	ODOUR PATROL
SITE:	ORGANIC RESOURCES RECOVERY CENTRE PHASE 1 (O-PARK 1)	NO. OF LOCATIONS:	9
PO:	--		

COMMENTS

Odour Patrol was conducted by the staff of ALS Technichem during 10:20 - 10:38 and 14:30 - 14:48.

Sampling information (Project name, Sample ID) is provided by client.

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

The results related only to the items tested. All pages of this report have been checked and approved for release.


Fung Lim Chee, Richard
Managing Director - Hong Kong



1. Summary of Work

The odour patrol was conducted during daytime and evening time. Detailed patrol route was shown in Appendix 1.

2. Odour Patrol

Odour patrolling is a process to make use of the calibrated olfactory senses (i.e. the nasal sense) of the patrol members to evaluate the odour and its intensity during a patrol exercise at the site.

The patrol work was conducted by two odour patrol team members from ALS Technichem (HK) Pty Ltd during each time session. All members are free from any respiratory diseases during patrol day. None of the members has been working or living in the area of the vicinity of the inspection zone.

The patrol team was required to move slowly from one to the other monitoring locations and use their olfactory senses to detect odour at each location.

The location of odour sources and the areas to be affected by the odour nuisance were identified as much as possible.

During the patrolling, the meteorological and surrounding information were recorded:

- the prevailing weather condition;
- the wind direction;
- the wind speed;
- location where odour is spotted;
- possible source of odour;
- perceived intensity of the odour;
- duration of odour; and
- characteristics of the odour detected.

The perceived intensity is to be divided into 5 levels which are ranked in an ascending order as follows:

0	Not detected	No odour perceives or an odour so weak that it cannot be easily characterised or described
1	Slight	Identifiable odour, slight
2	Moderate	Identifiable odour, moderate
3	Strong	Identifiable odour, strong
4	Extreme	Severe odour

The odour patrol locations were shown in Appendix 1.



3. Odour Patrol Result

3.1 Daytime:

Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
1	1	Sunny	10:20	33.5	66.8	0.2	325	1	Continuous	Side wind	Refuse	Tipping Hall
	2							1				
2	1	Sunny	10:22	34.9	68.6	0.0	--	1	Continuous	NA	Refuse	Tipping Hall
	2							1				
3	1	Sunny	10:25	34.7	70.8	0.4	330	1	Continuous	Downwind	Biogas	Biogas Tank Valve Holder
	2							2				
4	1	Sunny	10:27	35.5	67.0	0.0	--	1	Continuous	NA	Mild rotten egg smell	Suspension Buffer Tank
	2							1				
5	1	Sunny	10:31	33.0	74.6	0.9	303	0	NA	NA	NA	NA
	2							0				



Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
6	1	Sunny	10:32	33.1	78.3	0.6	301	0	NA	NA	NA	NA
	2							0				
7	1	Sunny	10:34	34.0	73.5	0.6	310	0	NA	NA	NA	NA
	2							0				
8	1	Sunny	10:36	33.7	70.2	0.8	314	0	NA	NA	NA	NA
	2							0				
9	1	Sunny	10:38	26.5	70.5	--	--	1	Continuous	NA	Artificial Fragrance ^[Note 1]	Air Purifier
	2							1				

Remark:

- T: Air Temperature
- RH: Relative Humidity
- WS: Wind Speed
- WD: Wind Direction
- NA: Not Applicable

Note 1: Artificial fragrance is not classified as odour nuisance according to the contract requirement of O-Park1 if odour intensity level 2 is perceived.



3.2 Evening time:

Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
1	1	Sunny	14:30	34.7	64.6	0.5	186	1	Intermittent	Side wind	Refuse	Tipping Hall
	2							1				
2	1	Sunny	14:32	34.2	67.5	0.4	127	1	Continuous	Downwind	Refuse	Tipping Hall
	2							1				
3	1	Sunny	14:35	34.2	68.7	1.2	163	1	Continuous	Upwind	Biogas	Biogas Tank Valve Holder
	2							0	NA	NA	NA	NA
4	1	Sunny	14:36	34.0	72.7	0.7	155	0	NA	NA	NA	NA
	2							0				
5	1	Sunny	14:39	35.7	72.6	0.6	299	1	Continuous	Side wind	Compost	Composting Hall
	2							1				



Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
6	1	Sunny	14:41	34.7	72.3	0.6	284	0	NA	NA	NA	NA
	2							0				
7	1	Sunny	14:43	35.9	70.6	0.4	106	0	NA	NA	NA	NA
	2							0				
8	1	Sunny	14:46	35.5	73.2	1.2	022	0	NA	NA	NA	NA
	20							0				
9	1	Sunny	14:48	26.9	68.6	--	--	1	Continuous	NA	Artificial Fragrance ^[Note 1]	Air Purifier
	2							1				

Remark:

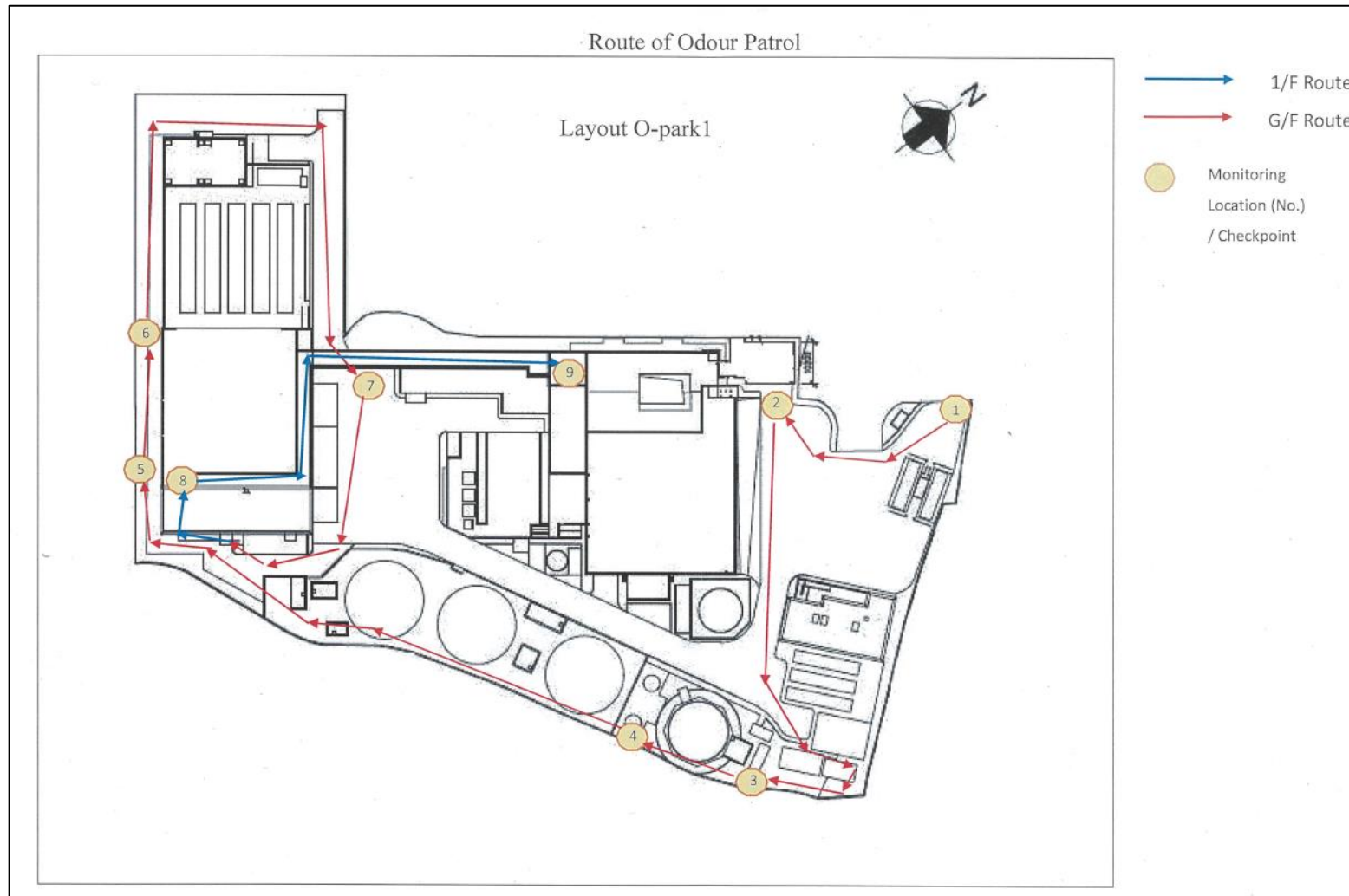
- T: Air Temperature
- RH: Relative Humidity
- WS: Wind Speed
- WD: Wind Direction

NA: Not Applicable

Note 1: Artificial fragrance is not classified as odour nuisance according to the contract requirement of O-Park1 if odour intensity level 2 is perceived.



APPENDIX 1





APPENDIX 2

A2.1 Odour Patrol at Different Locations - Morning time



Location: 1



Location: 2



Location: 3



Location: 4



Location: 5



Location: 6



Location: 7



Location: 8



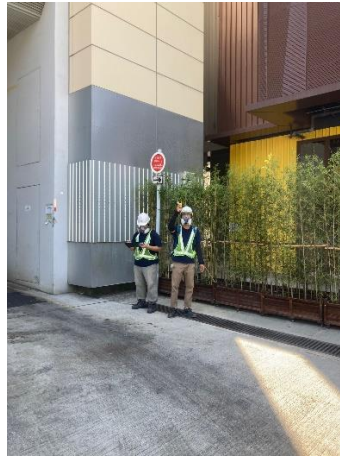
Location: 9



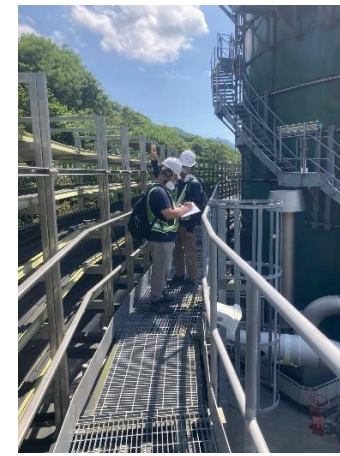
A2.1 Odour Patrol at Different Locations - Evening time



Location: 1



Location: 2



Location: 3



Location: 4



Location: 5



Location: 6



Location: 7



Location: 8

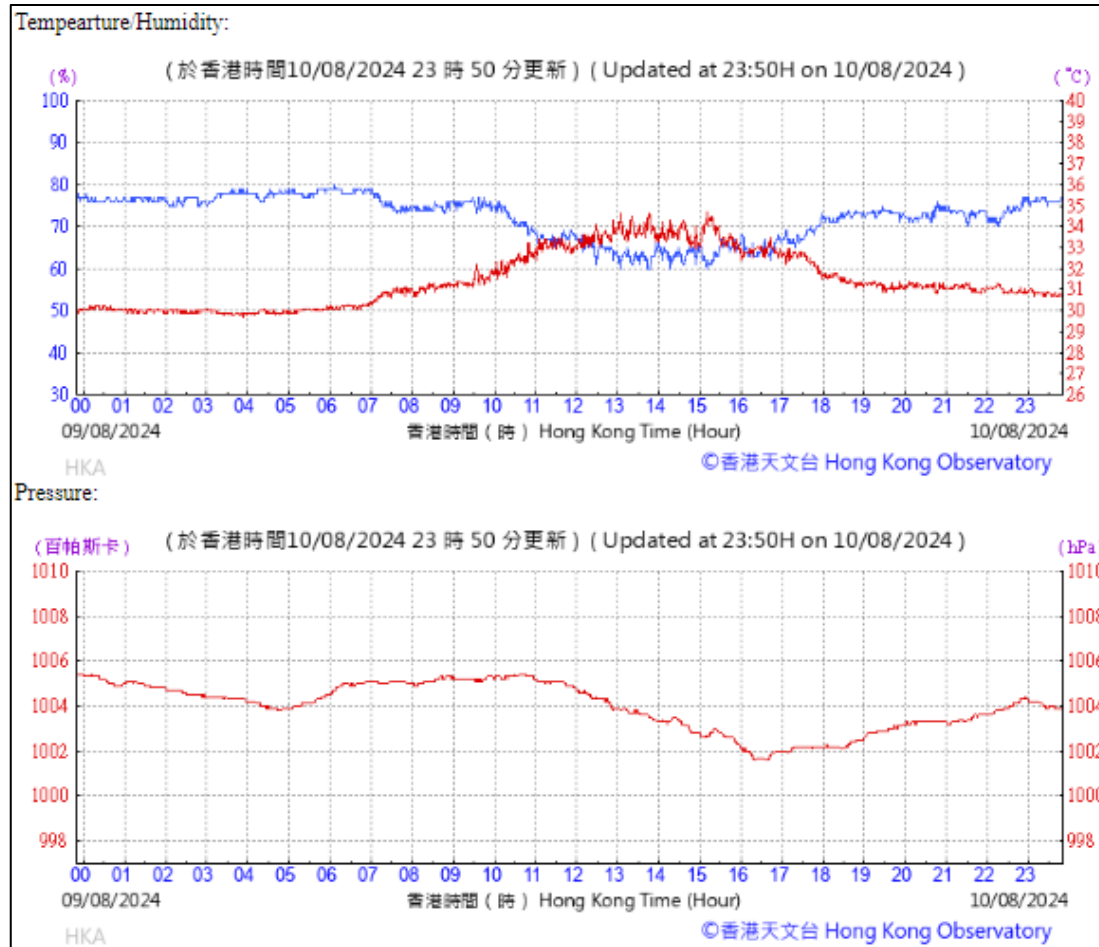


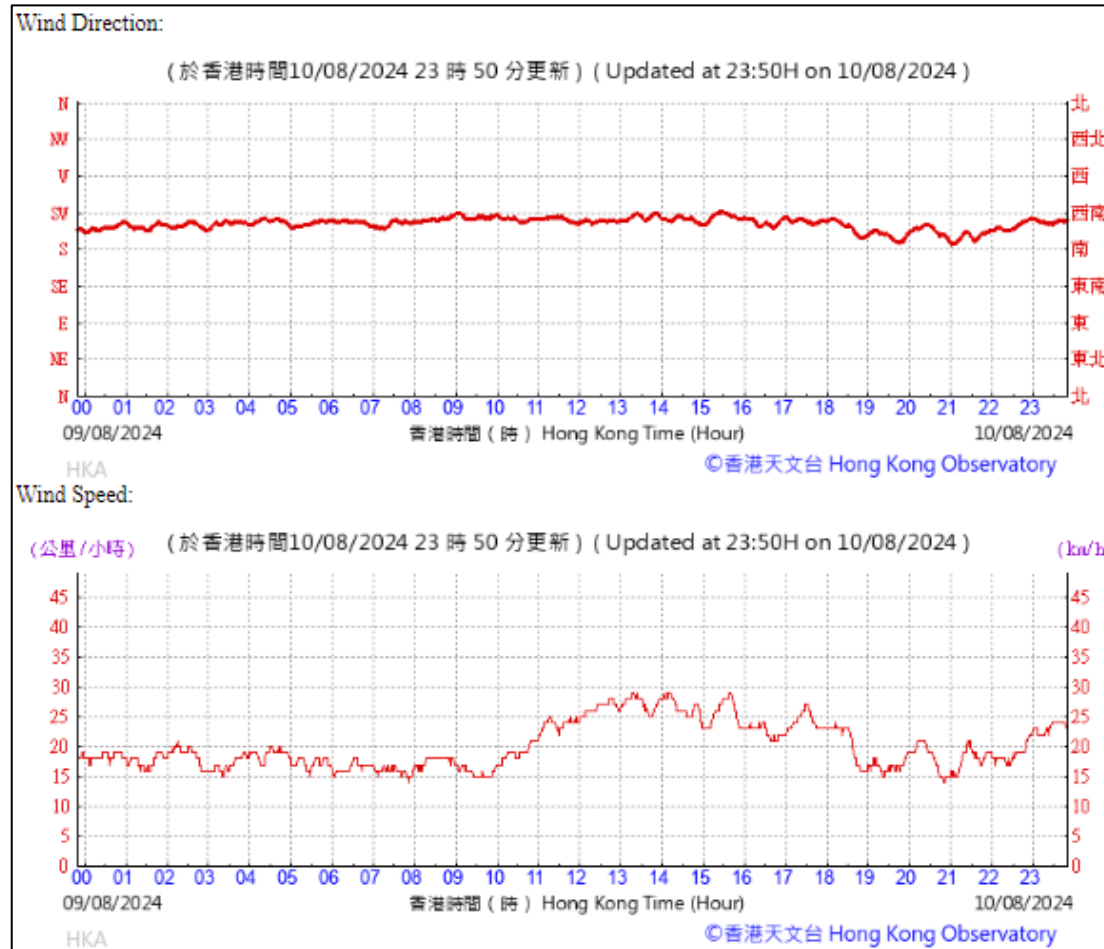
Location: 9



APPENDIX 3

Extract of Meteorological Observations from Hong Kong Airport Observatory Station





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CERTIFICATE OF ANALYSIS

CLIENT:	OSCAR BIOENERGY JOINT VENTURE	WORK ORDER:	HK2433076
CONTACT:	MS LAWRENCE LEE		
ADDRESS:	NO. 5, SHAM FUNG ROAD, SIU HO WAN, NORTH LANTAU ISLAND, NT, HONG KONG	LABORATORY:	HONG KONG
		SUB-BATCH:	0
		DATE OF PATROL:	15 AUGUST 2024
		DATE OF ISSUE:	27 AUGUST 2024
PROJECT:	AD HOC ODOUR PATROL FOR THE ORGANIC RESOURCES RECOVERY CENTRE PHASE 1	SAMPLE TYPE:	ODOUR PATROL
SITE:	ORGANIC RESOURCES RECOVERY CENTRE PHASE 1 (O-PARK 1), SIU HO WAN	NO. OF LOCATIONS:	9
PO NO.	PO24070046		

COMMENTS

This was an ad hoc odour patrol event requested by the client and conducted by ALS staff during 10:37 - 10:58 and 13:14 - 13:34. Second round was conducted due to having odour Intensity Level exceeding 2 during the first round Patrol.

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.
The results related only to the items tested. Sampling information (Project name, Sample ID) is provided by the client. All pages of this report have been checked and approved for release.


Fung Lim Chee, Richard
Managing Director - Hong Kong

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1. Summary of Work

This ad hoc odour patrol was conducted at nine (9) selected locations as requested by the client. Second round was conducted after 1 hour time from the completion of first round patrol.

2. Odour Patrol

Odour patrolling is a process to make use of the calibrated olfactory senses (i.e. the nasal sense) of the patrol members to evaluate the odour and its intensity during a patrol exercise at the site.

The patrol work was conducted by two odour patrol team members from ALS Technichem (HK) Pty Ltd during each time session. All members are free from any respiratory diseases during patrol day. None of the members has been working or living in the area of the vicinity of the inspection zone.

The patrol team was required to move slowly from one to the other monitoring locations and use their olfactory senses to detect odour at each location.

The location of odour sources and the areas to be affected by the odour nuisance were identified as much as possible.

During the patrolling, the meteorological and surrounding information were recorded:

- the prevailing weather condition;
- the wind direction;
- the wind speed;
- location where odour is spotted;
- possible source of odour;
- perceived intensity of the odour;
- duration of odour; and
- characteristics of the odour detected.

The perceived intensity is to be divided into 5 levels which are ranked in an ascending order as follows:

0	Not detected	No odour perceives or an odour so weak that it cannot be easily characterised or described
1	Slight	Identifiable odour, slight
2	Moderate	Identifiable odour, moderate
3	Strong	Identifiable odour, strong
4	Extreme	Severe odour

The odour patrol location was shown in Appendix 1.



3. Odour Patrol Result
3.1 First Round

Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
1	1	Raining	10:37	28.6	81.7	3.1	157	2	Continuous	Side wind	Refuse	Tipping Hall
	2											
2	1	Raining	10:39	29.0	85.1	1.0	093	3	Continuous	Downwind	Refuse	Tipping Hall
	2											
3	1	Raining	10:44	28.9	95.3	0.0	--	2	Continuous	Downwind	Biogas	Biogas Tank Valve Holder
	2											
4	1	Raining	10:45	28.3	97.7	0.0	--	0	NA	NA	NA	NA
	2											
5	1	Raining	10:48	26.8	96.4	0.9	136	1	Intermittent	Downwind	Grassy	Nearby Vegetation
	2											



Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
6	1	Raining	10:49	26.8	95.6	0.5	325	0	NA	NA	NA	NA
	2							0				
7	1	Raining	10:52	27.1	97.9	1.9	109	1	Continuous	Side wind	Refuse	Composting Hall
	2							1				
8	1	Raining	10:55	27.2	97.2	1.0	312	1	Intermittent	Side wind	Compost	Composting Hall
	2							1				
9	1	Raining	10:58	24.3	100	--	--	1	Continuous	NA	Detergent	Floor
	2							1				

Remark:

T: Air Temperature;
 RH: Relative Humidity;
 WS: Wind Speed;
 WD: Wind Direction.

NA - Not Applicable



3.2 Second Round

Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
1	1	Raining	13:14	27.4	79.0	0.0	--	0	NA	NA	NA	NA
	2							0				
2	1	Raining	13:16	27.0	85.5	0.0	--	2	Continuous	NA	Refuse	Tipping Hall
	2							2				
3	1	Raining	13:21	26.7	95.9	0.0	--	1	Continuous	NA	Biogas	Biogas Tank Valve Holder
	2							1				
4	1	Raining	13:22	26.8	95.4	0.0	--	0	NA	NA	NA	NA
	2							0				
5	1	Raining	13:25	25.3	95.2	0.0	--	1	Continuous	NA	Grassy	Nearby Vegetation
	2							1				



Location	Panellist	Weather	Time	T (°C)	RH (%)	WS (m/s)	WD (Degree)	Odour Intensity	Duration of Odour	Direction from Source	On-Site Observation	
											Odour Characteristics	Potential Odour Source
6	1	Raining	13:26	27.2	95.8	0.0	NA	0	NA	NA	NA	NA
	2							0				
7	1	Raining	13:29	26.7	97.5	0.4	304	0	NA	NA	NA	NA
	2							0				
8	1	Raining	13:32	26.8	97.9	0.5	358	0	NA	NA	NA	NA
	2							0				
9	1	Raining	13:34	23.1	100	--	--	1	Continuous	NA	Detergent	Floor
	2							1				

Remark:

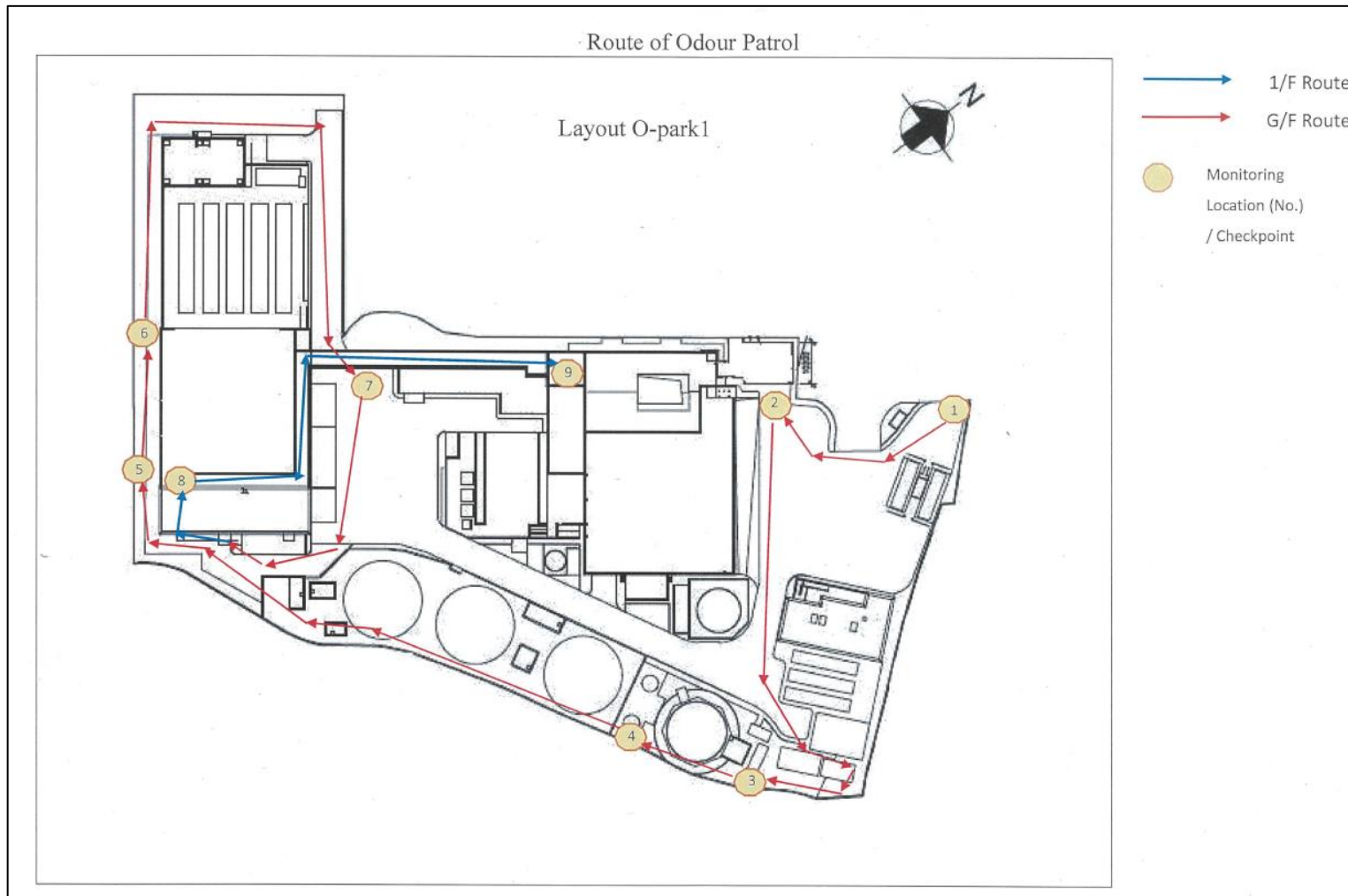
T: Air Temperature;
 RH: Relative Humidity;
 WS: Wind Speed;
 WD: Wind Direction.

NA - Not Applicable



APPENDIX 1

Odour Patrol Route





APPENDIX 2

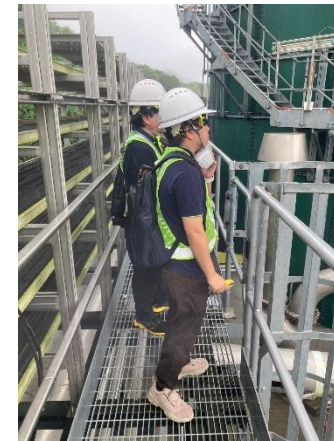
Odour Patrol Locations Photos - First Round



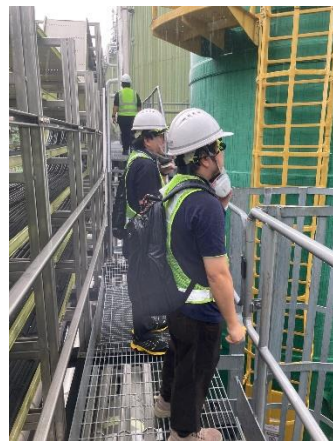
Location: 1



Location: 2



Location: 3



Location: 4



Location: 5



Location: 6



+Location: 7



Location: 8



Location: 9



Odour Patrol Locations Photos - Second Round



Location: 1



Location: 2



Location: 3



Location: 4



Location: 5



Location: 6



+Location: 7



Location: 8

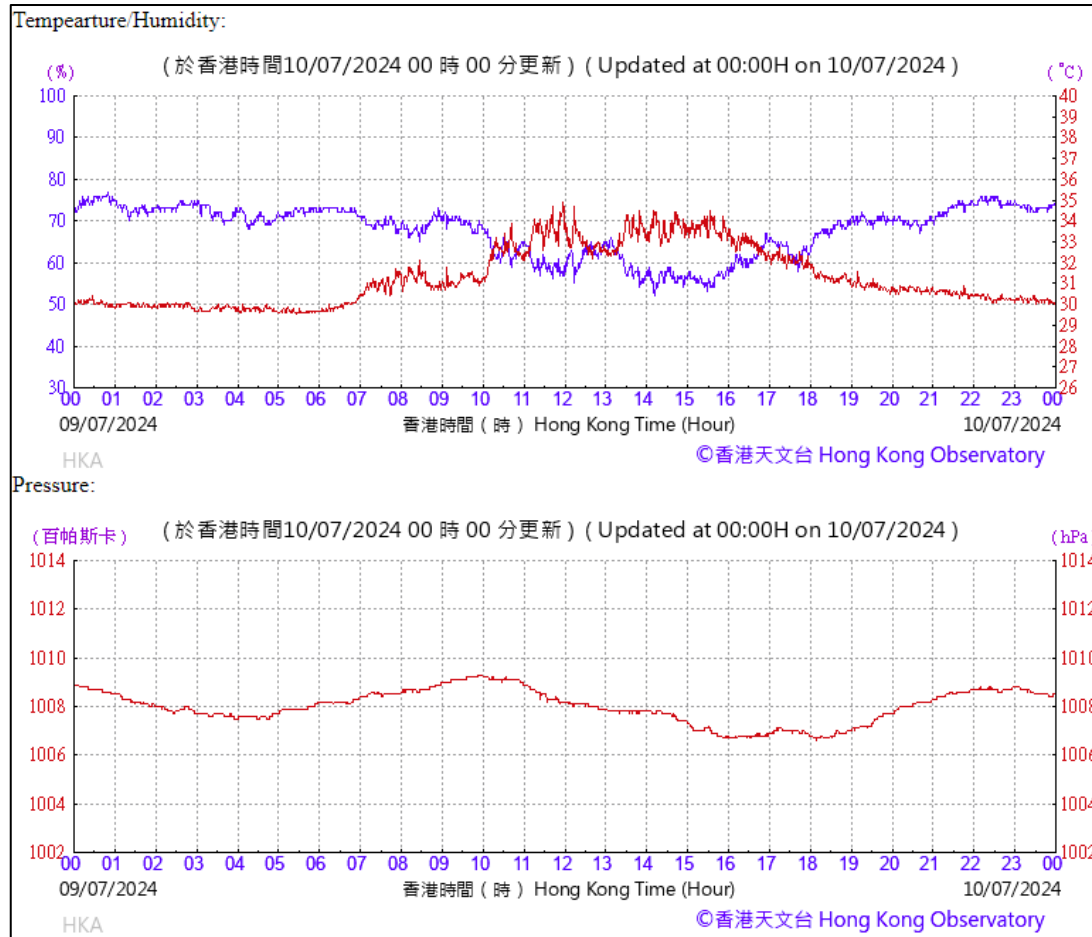


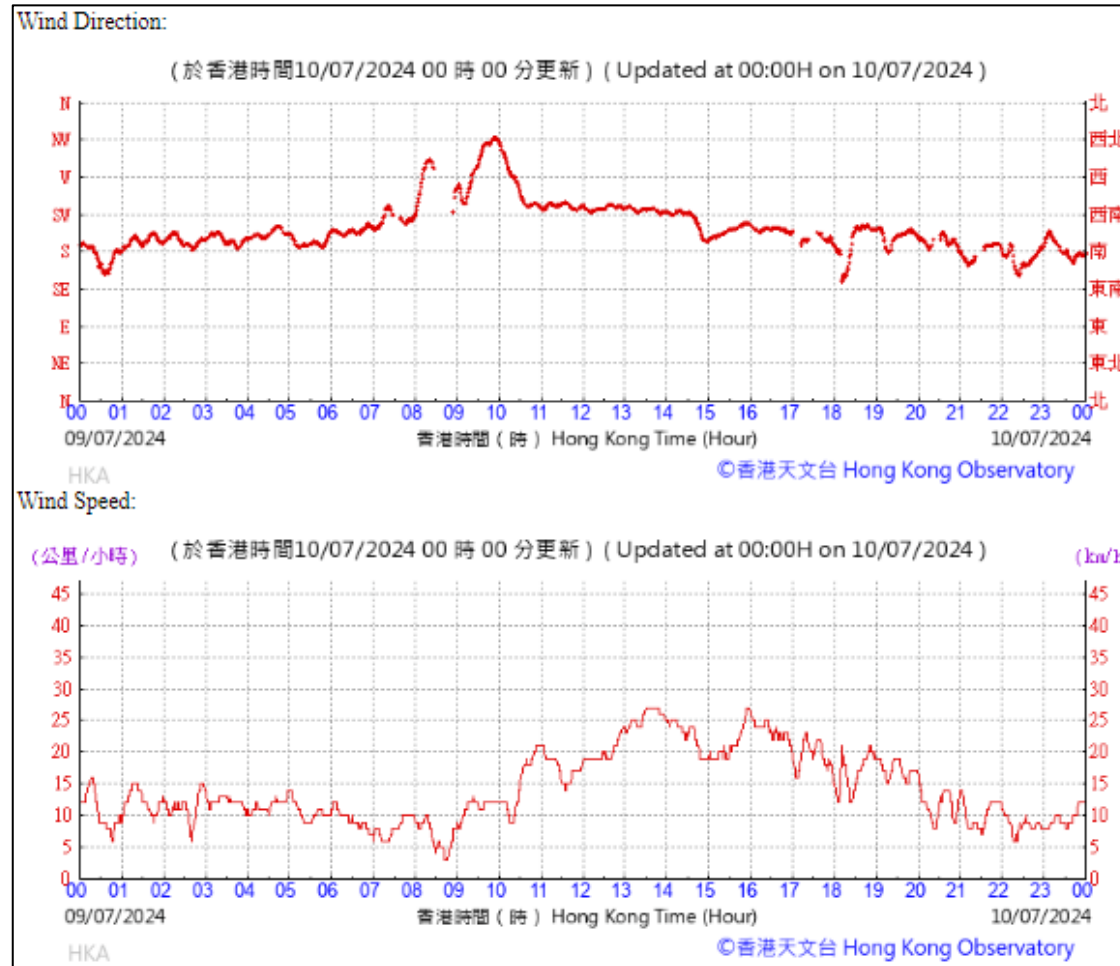
Location: 9



APPENDIX 3

Extract of Meteorological Observations from Hong Kong Airport Observatory Station





----- END OF REPORT-----