

Annex G

Odour Patrol Result



ALS Technichem (HK) Pty Ltd
11/F, Chung Shun Knitting Centre
1-3 Wing Yip Street
Kwai Chung, N.T., Hong Kong
T +852 2610 1044 F +852 2610 2021

CERTIFICATE OF ANALYSIS

| | | | |
|----------|--|-------------------|-----------------|
| CLIENT: | OSCAR BIOENERGY JOINT VENTURE | WORK ORDER: | HK2229534 |
| CONTACT: | MS ANGEL TJIA | LABORATORY: | HONG KONG |
| ADDRESS: | NO. 5, SHAM FUNG ROAD, SIU HO WAN, NORTH LANTAU ISLAND, NT, HONG KONG | SUB-BATCH: | 0 |
| | | DATE OF PATROL: | 01 AUGUST, 2022 |
| | | DATE OF ISSUE: | 10 AUGUST, 2022 |
| 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: | 8 |

COMMENTS

Odour Patrol was conducted by the staff of ALS Technichem (HK) Pty Ltd during 11:03 - 11:20 and 15:59 - 16:14.

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.


Richard Fung
Managing Director - Hong Kong

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1. Summary of Work

The odour patrol was conducted during daytime and evening time.

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 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 |
| 8 | 1 | Sunny | 11:03 | 33.1 | 72.8 | 0.3 | 341 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 7 | 1 | Sunny | 11:04 | 33.8 | 69.8 | 0.2 | 339 | 1 | Intermittent | Upwind | Garbage | Pre-Treatment Hall |
| | 2 | | | | | | | 1 | | | | |
| 2 | 1 | Sunny | 11:07 | 34.2 | 69.7 | 0.9 | 334 | 1 | Intermittent | Downwind | Garbage | Pre-Treatment Hall |
| | 2 | | | | | | | 1 | | | | |
| 3 | 1 | Sunny | 11:09 | 33.1 | 70.5 | 1.3 | 292 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 5 | 1 | Sunny | 11:12 | 34.3 | 70.2 | 0.0 | -- | 1 | Continuous | NA | Grassy | 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 | Sunny | 11:15 | 32.9 | 70.3 | 0.8 | 300 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 9 | 1 | Sunny | 11:18 | 33.4 | 70.6 | 0.4 | 318 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 10 | 1 | Sunny | 11:20 | 25.6 | 56.1 | - | - | 1 | NA | NA | Musty | Air Conditioner |
| | 2 | | | | | | | 1 | | | | |

Remark:

T: Air Temperature ;

RH: Relative Humidity;

WS: Wind Speed;

WD: Wind Direction.

**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 |
| 8 | 1 | Sunny | 15:39 | 33.1 | 74.0 | 0.3 | 277 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 7 | 1 | Sunny | 16:00 | 33.3 | 74.9 | 1.4 | 315 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 2 | 1 | Sunny | 16:02 | 32.5 | 74.9 | 1.7 | 316 | 1 | Intermittent | Downwind | Biogas | Biogas Tank Valve Holder |
| | 2 | | | | | | | 1 | | | | |
| 3 | 1 | Sunny | 16:04 | 33.9 | 69.3 | 1.5 | 302 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 5 | 1 | Sunny | 16:07 | 34.9 | 70.1 | 0.0 | -- | 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 | 16:09 | 35.2 | 75.3 | 0.4 | 264 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 9 | 1 | Sunny | 16:12 | 34.3 | 68.3 | 0.5 | 312 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 10 | 1 | Sunny | 16:14 | 24.8 | 59.7 | - | - | 1 | Continuous | NA | Musty | Air Conditioner |
| | 2 | | | | | | | 1 | | | | |

Remark:

T: Air Temperature ;

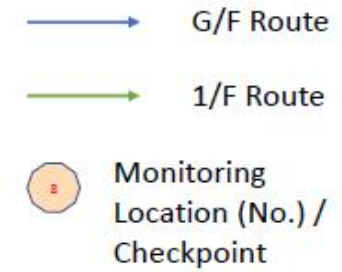
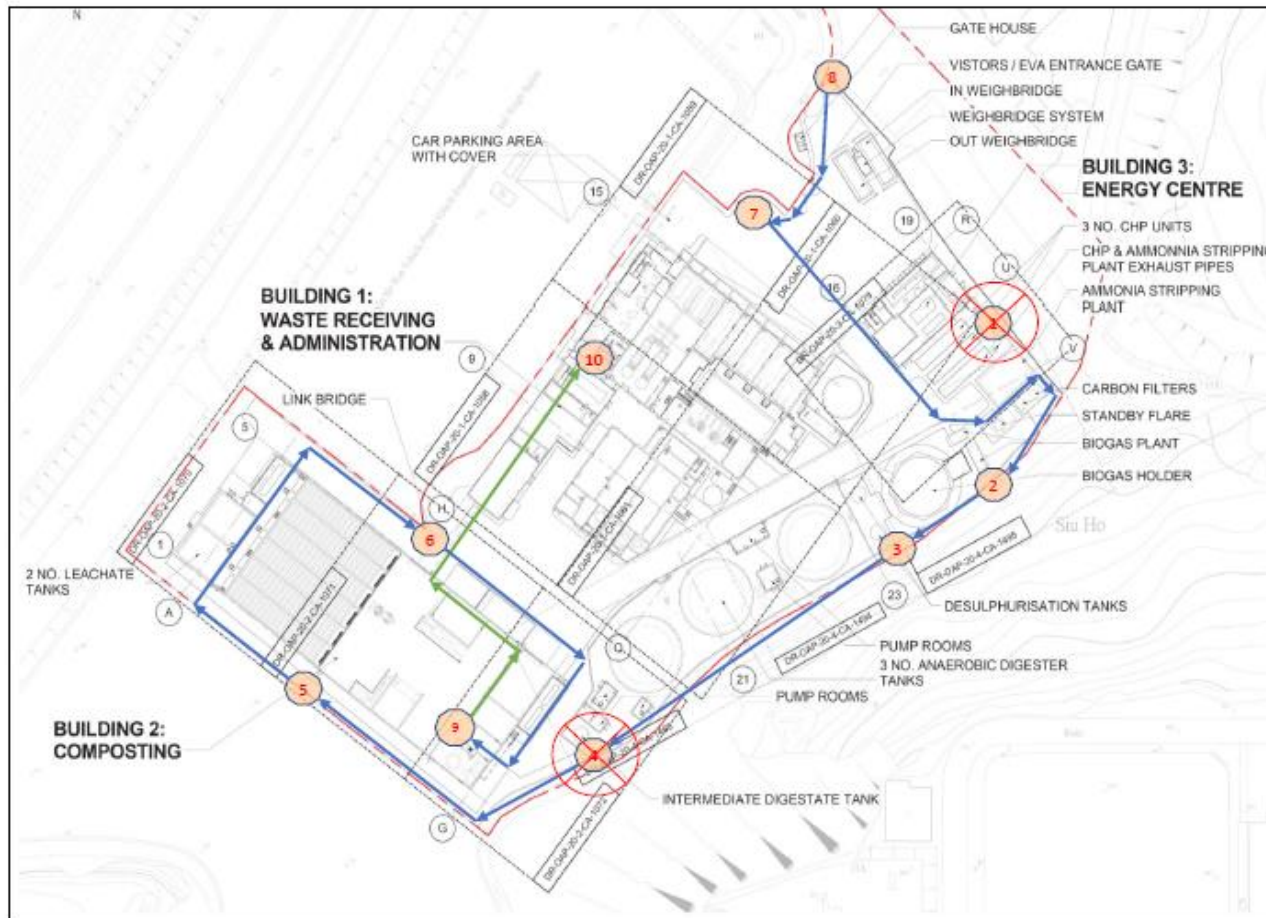
RH: Relative Humidity;

WS: Wind Speed;

WD: Wind Direction.

APPENDIX 1

Odour Patrol Route



APPENDIX 2

A2.1 Odour Patrol at Different Locations - Daytime (First round)



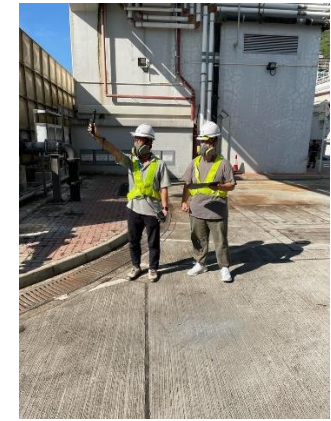
Location: 2



Location: 3



Location: 5



Location: 6



Location: 7



Location: 8



Location: 9



Location: 10

A2.2 Odour Patrol at Different Locations - Evening time



Location: 2



Location: 3



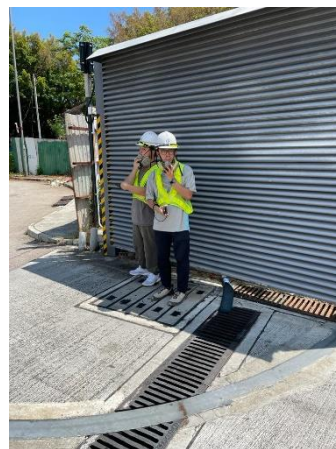
Location: 5



Location: 6



Location: 7



Location: 8



Location: 9

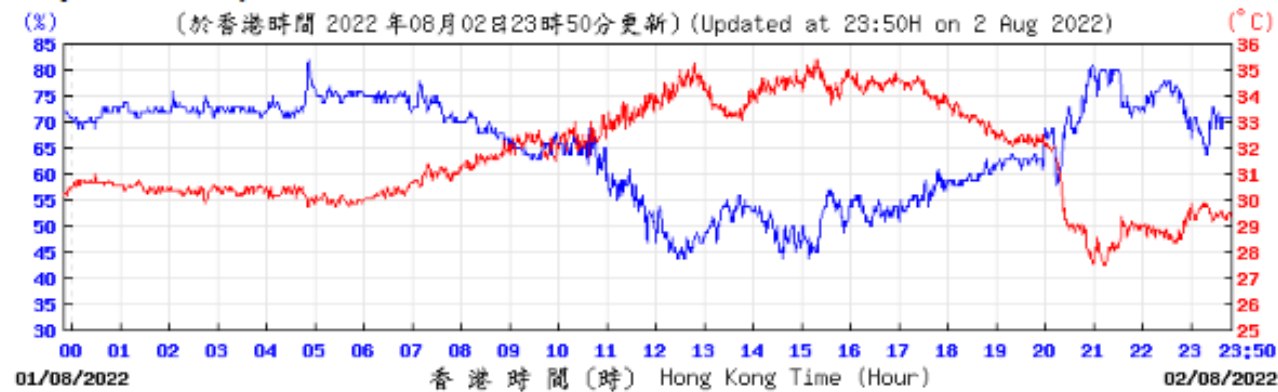


Location: 10

APPENDIX 3

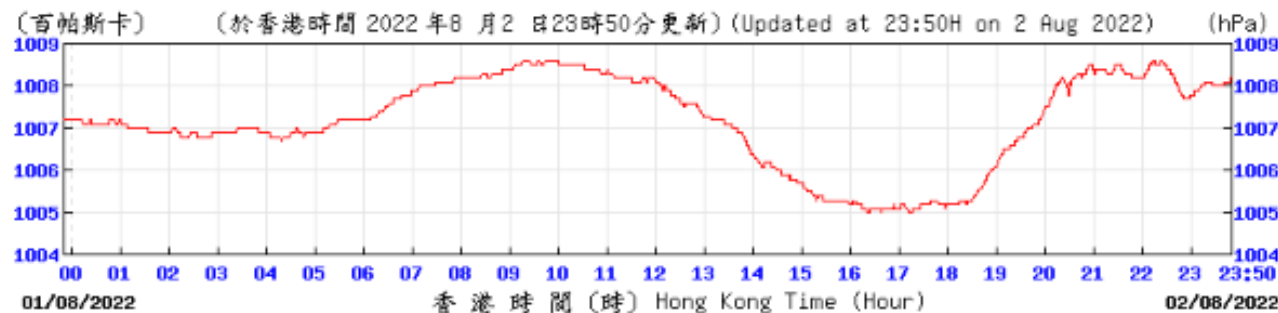
Extract of Meteorological Observations from Hong Kong Airport Observatory Station

Temperature Humidity:



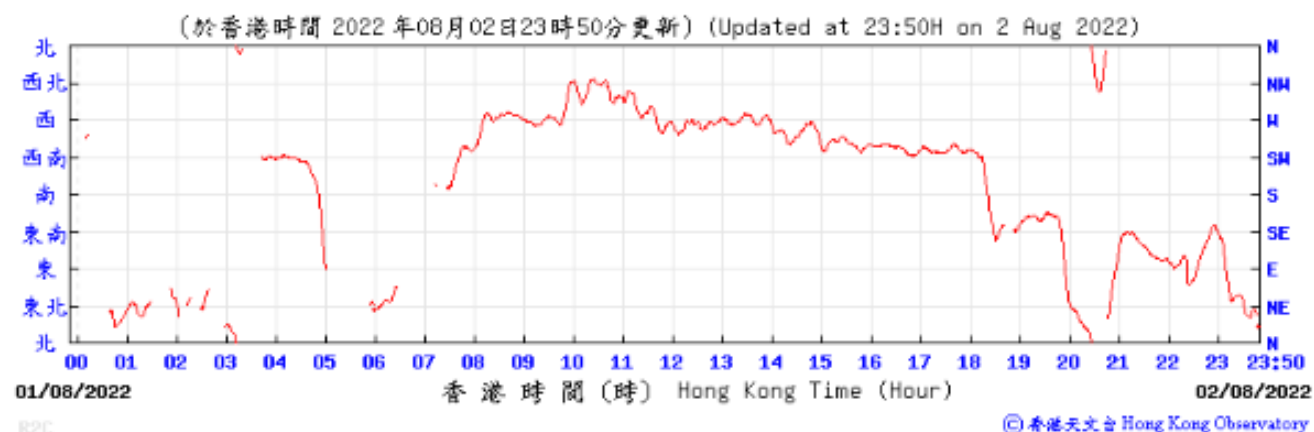
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Pressure:

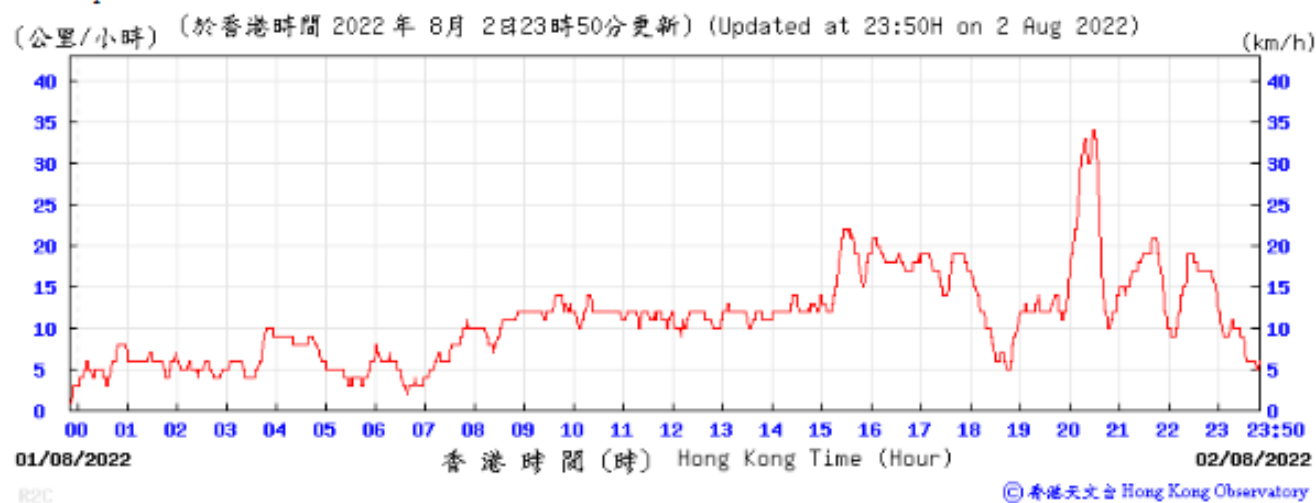


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Wind Direction:



Wind Speed:





CERTIFICATE OF ANALYSIS

| | | | |
|----------|---|-------------------|-------------------|
| CLIENT: | OSCAR BIOENERGY JOINT VENTURE | WORK ORDER: | HK2233555 |
| CONTACT: | MS ANGEL TJIA | | |
| ADDRESS: | NO. 5, SHAM FUNG ROAD, SIU HO WAN, NORTH LANTAU ISLAND, NT, HONG KONG | LABORATORY: | HONG KONG |
| | | SUB-BATCH: | 0 |
| | | DATE OF PATROL: | 24 AUGUST 2022 |
| | | DATE OF ISSUE: | 02 SEPTEMBER 2022 |
| PROJECT: | AD HOC 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: | 8 |

COMMENTS

This was an ad hoc odour patrol event requested by the client and conducted by ALS Technichem staff during 10:32 - 10:48 on 24th August 2022.

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.

Richard Fung
Managing Director - Hong Kong

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1. Summary of Work

This ad hoc odour patrol was conducted at eight (8) selected locations as requested by the client.

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:**

| 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 |
| 8 | 1 | Cloudy | 10:32 | 33.2 | 73.4 | 2.2 | 154 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 7 | 1 | Cloudy | 10:33 | 34.1 | 72.7 | 0.7 | 272 | 1 | Continuous | Downwind | Garbage | Pre-Treatment Hall |
| | 2 | | | | | | | 1 | | | | |
| 2 | 1 | Cloudy | 10:36 | 32.8 | 74.9 | 1.7 | 181 | 1 | Intermittent | Upwind | Biogas | Biogas Tank Valve Holder |
| | 2 | | | | | | | 1 | | | | |
| 3 | 1 | Cloudy | 10:37 | 33.4 | 74.9 | 1.7 | 087 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 5 | 1 | Cloudy | 10:40 | 33.0 | 81.8 | 0.0 | -- | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 1 | Intermittent | NA | Grassy | Nearby Vegetation |



Work Order: HK2233555

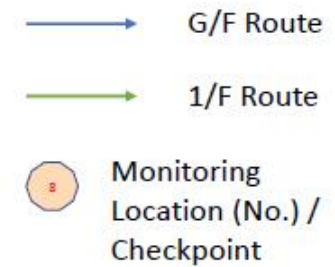
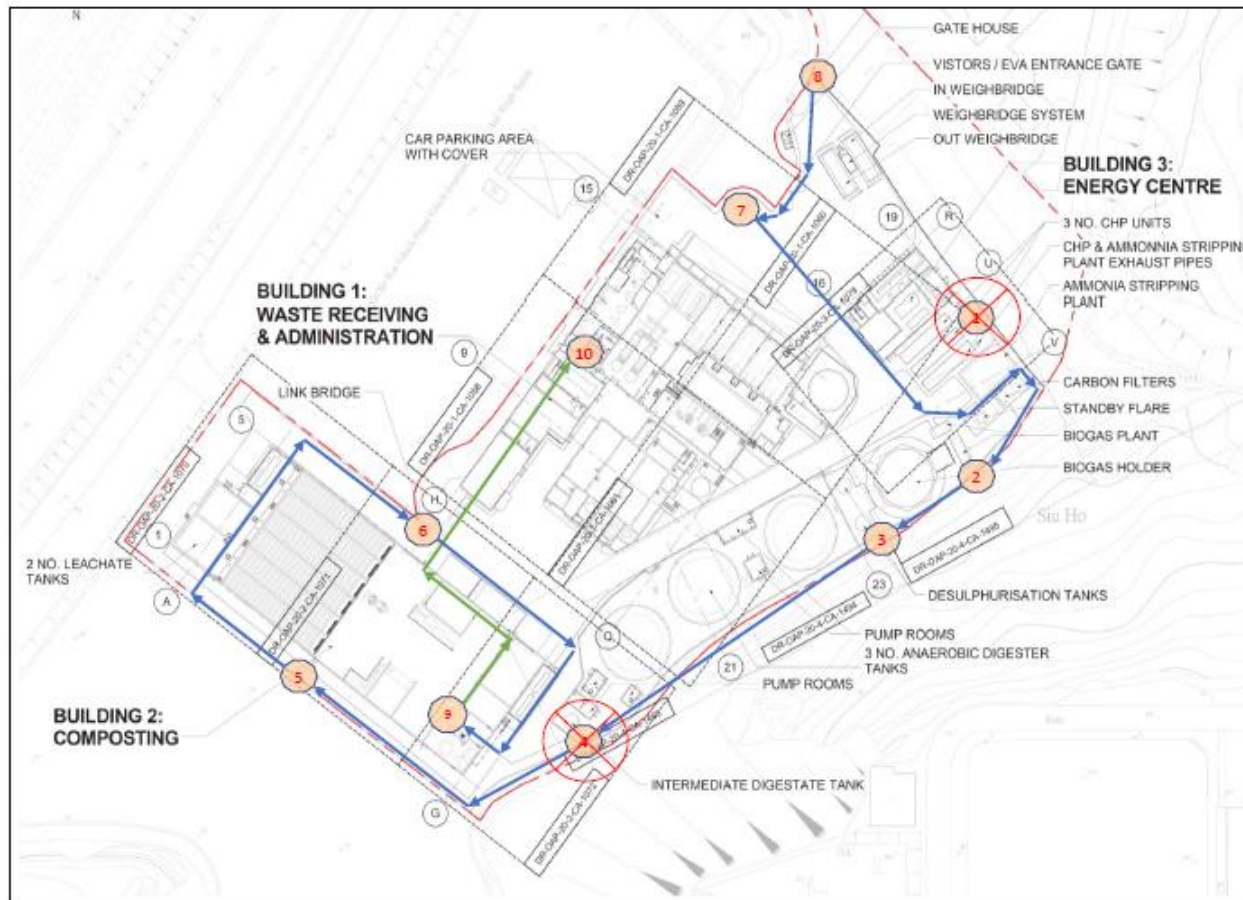
| Location | Panellist | Weather | Time | T (°C) | RH (%) | WS (m/s) | WD (Degree) | Odour Intensity | Duration of Odour | Direction from Source | On-Site Observation | |
|----------|-----------|---------|-------|-----------|-----------|-------------|----------------|--------------------|----------------------|-----------------------------|--------------------------|---------------------------|
| | | | | | | | | | | | Odour Characteristics | Potential Odour Source |
| 6 | 1 | Cloudy | 10:43 | 33.3 | 73.8 | 1.3 | 117 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 9 | 1 | Cloudy | 10:45 | 33.2 | 81.3 | 0.8 | 261 | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |
| 10 | 1 | Cloudy | 10:48 | 28.0 | 68.1 | NA | NA | 0 | NA | NA | NA | NA |
| | 2 | | | | | | | 0 | | | | |

Remark:

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

APPENDIX 1

Odour Patrol Route





Work Order: HK2233555

APPENDIX 2

Odour Patrol Locations Photos



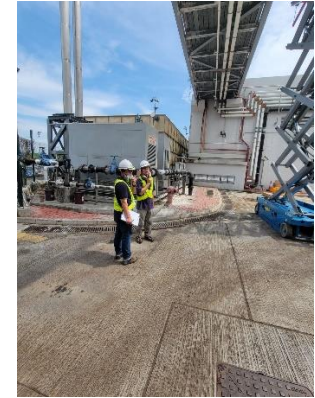
Location: 2



Location: 3



Location: 5



Location: 6



Location: 7



Location: 8



Location: 9

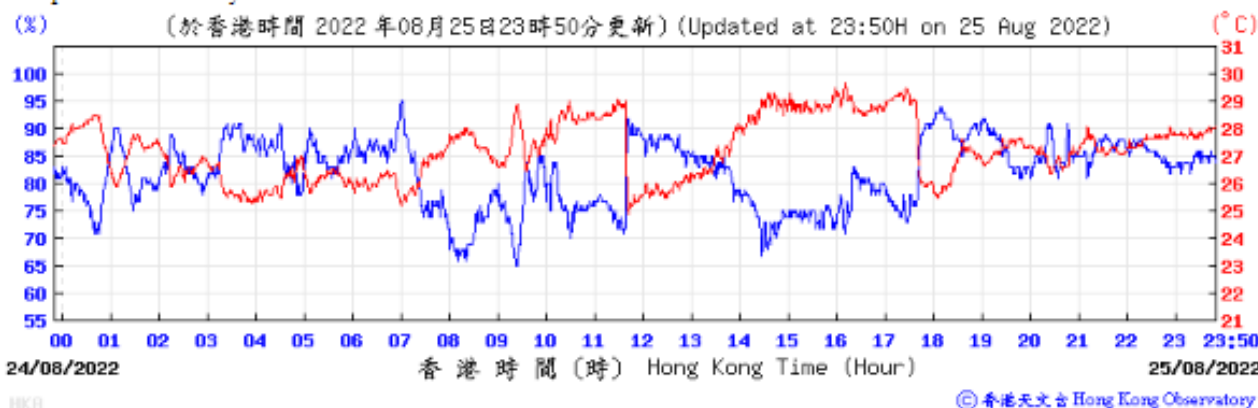


Location: 10

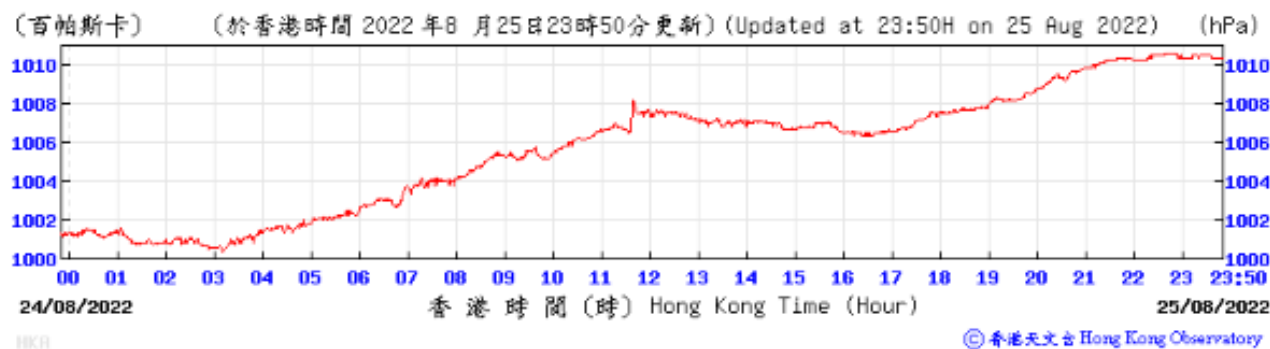
APPENDIX 3

Extract of Meteorological Observations from Hong Kong Airport Observatory Station

Temperature/Humidity:

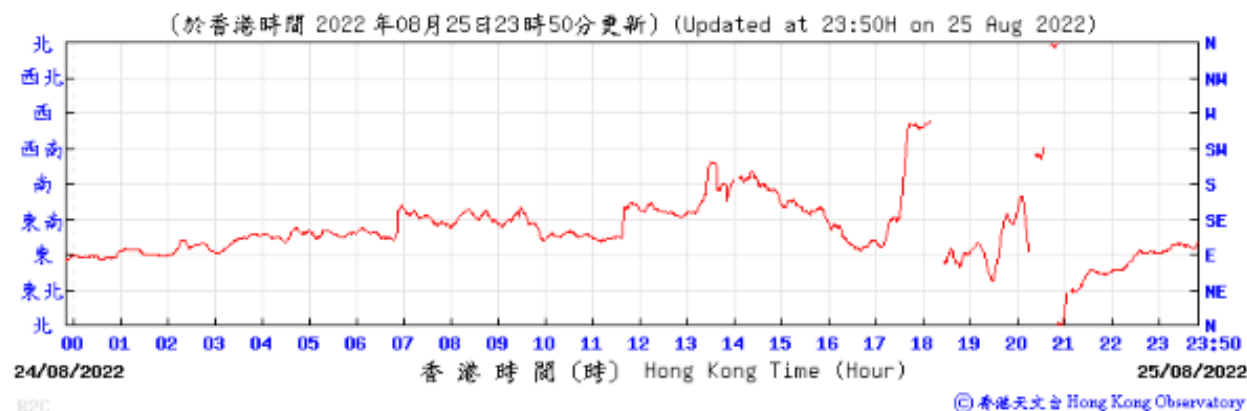


Pressure:





Wind Direction:



Wind Speed:

