Annex E

Laboratory Results for NMVOCs



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CERTIFICATE OF ANALYSIS			
CLIENT:	Oscar Bioenergy Joint Venture	WORK ORDER:	HK2018673
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	Siu Ho Wan, Lantau Island,	SUB-BATCH:	0
NT, Hong Kong	DATE RECEIVED: DATE OF ISSUE:	15 <sup>th</sup> May, 2020 27 <sup>th</sup> May, 2020	
PROJECT: SITE:	Stack Gas Sampling – CHP1 ORRC1, Siu Ho Wan, Lantau Island	SAMPLE TYPE: NO. OF SAMPLES:	Air 1
PO:	ISTATIO		

#### COMMENTS

One (1) stack gas sample for CHP-1 was collected by ALS Technichem (HK) staff on 15<sup>th</sup> May, 2020 at the Organic Resources Recovery Centre (Phase 1) in Lantau Island.

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

The sample(s) was analysed and reported on as received basis.

NOTES

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

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Richard Fund Managing Director - Hong Kong

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# 1. Summary of Work

The document is the final report for the stack gas sampling and testing event for Oscar Bioenergy Joint Venture at Siu Ho Wan, North Lantau Island.

Sampling Date:	15 <sup>th</sup> May 2020		
Location of Stack:	ORRC1, Siu Ho Wan		
No. of Stack:	1		
Name of Stack:	CHP-1		

### Methods for Stack Sampling and Analysis:

Parameter	Method Reference	Sampling Time (minutes)
Volatile Organic Compounds (VOCs) <sup>[1]</sup>	US EPA Method 18	60
Non-Methane Volatile Organic Compounds (NMCOCs) <sup>[1]</sup>	US EPA Method 18	60

Note:

[1]: Results expressed as carbon

#### 2. Sampling Summary Volatile Organic Compounds (VOCs)

Sample gas was collected by using a stainless steel sampling probe, from the centroid of the stack, into the Tedlar bag by passive sampling technique.

The measurement of total volatile organic compounds (VOCs) content in the sample was conducted in references to BS EN 12619. VOCs content was determined by measuring the methane and non-methane volatile organic compounds of the sample by Gas Chromatograph-Flame Ionisation Detector (GC-FID).

VOCs was reported as the sum of methane and non-methane organics content in the sample.

## 3. Sampling Period and Stack Parameter

Test Parameter	Sampling Period	
Volatile Organic Compounds (VOCs)	15 May 2020 12:07 - 13:07	

Stack Parameter	Unit	Concentration	
Oxygen	%	10.3	



Parameter	Unit	Reporting Limit	Result <sup>[1]</sup>
Gaseous & vaporous organic substances (VOCs) [2]	mg/m³	0.7	834
Methane (CH <sub>4</sub> ) <sup>[2]</sup>	mg/m³	0.5	826
Non-Methane Organic Carbon (NMOC) <sup>[2]</sup>	mg/m³	0.2	7.8

Note:

- [1] Results expressed as dry, at 0 degree Celsius temperature, 101.325 kilopascal pressure and 6% O<sub>2</sub> content conditions.
  [2] Results expressed as carbon.