

CERTIFICATE OF ANALYSIS

Date : 06th September 2017
AMR Reference : AMR/COA/AA/111
Company : **CENVIRO (JOHOR) SDN. BHD.**
No. Lot PTD 2288,
Mukim Pantai Timur,
Daerah Kota Tinggi,
81600 Kota Tinggi,
Johor Darul Takzim.
Date Sample Received : 28th August 2017
Date of Monitoring : 24th August 2017
Type of sample : Ambient Air Monitoring
Sample Description : Received five (5) samples labeled as:
Marking : "A": PM10(A)-CJSB(A1)-17(1)
"B": PM2.5(A)-CJSB(A1)-17(1)
"C": HO(A)-CJSB(A1)-17(1)
"D": 3M(A)-CJSB(A1)-17(1)
"E": OZONE(A)-CJSB(A1)-17(1)

ANALYSIS RESULT

Parameter	Unit	*Status	Results				
			A	B	C	D	E
Dust/Particulate	g/spl	S/A	0.0573	-	-	-	-
Dust/Particulate	g/spl	S/A	-	0.0003	-	-	-
Sulphate (H ₂ SO ₄)	mg/spl	S/A	-	-	0.16	-	-
Nitrogen Dioxide (NO ₂)	mg/spl	S/A	-	-	-	<0.01	-
Ozone	μL/10ml	S/A	-	-	-	-	ND (<0.1)

Note:

- * Status: A- SMM Accredited, S/A- Subcontractor (SMM Accredited), N/A-Non SMM Accredited
- ND Not Detected
- < Less than



AHMAD NAZMI BIN ROSLAN
BSc (Hons) Industrial Chemistry
IKM Registered Chemist: M/4139/6947/14

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Laboratory Accredited by SMM for specific tests as per SMM Certificate No:633.

AMR ENVIRONMENTAL SDN. BHD. (GST No: 000086056960)

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CERTIFICATE OF ANALYSIS

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Company : **CENVIRO (JOHOR) SDN. BHD.**
No. Lot PTD 2288, Mukim Pantai Timur,
Daerah Kota Tinggi, 81600 Kota Tinggi, Johor Darul Takzim.
Date Sample Received : 25th August 2017
Date of Monitoring : 24th August 2017
Type of sample : Ambient Air Monitoring
Sample Description : Received seven (7) samples labeled as:
Marking : "A": PM10(A)-CJSB(A2)-17(1)
"B": PM2.5(A)-CJSB(A2)-17(1)
"C": HO(A)-CJSB(A2)-17(1)
"D": 3M(A)-CJSB(A2)-17(1)
"E": OZONE(A)-CJSB(A2)-17(1)
"F": HS(A)-CJSB(A2)-17(1)
"G": DI(A)-CJSB(A2)-17(1)

ANALYSIS RESULT

Parameter	Unit	*Status	Results						
			A	B	C	D	E	F	G
Dust/Particulate	g/spl	S/A	0.069	-	-	-	-	-	-
Dust/Particulate	g/spl	S/A	-	0.0004	-	-	-	-	-
Sulphate (H ₂ SO ₄)	mg/spl	S/A	-	-	0.12	-	-	-	-
Nitrogen Dioxide (NO ₂)	mg/spl	S/A	-	-	-	<0.01	-	-	-
Ozone	µL/10ml	S/A	-	-	-	-	ND (<0.1)	-	-
Hydrogen Chloride (HCl)	mg/spl	S/A	-	-	-	-	-	<0.01	-
Hydrogen Fluoride (HF)	mg/spl	S/A	-	-	-	-	-	-	<0.01
NM VOC as total organic carbon	µg/spl	S/A	-	-	-	-	-	-	-
Cadmium (Cd)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Thalium (Tl)	mg/spl	S/A	0.05	-	-	-	-	-	-
Mercury (Hg)	mg/spl	S/A	<0.005	-	-	-	-	-	-
Antimony (Sb)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Arsenic (As)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Lead (Pb)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Chromium (Cr)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Cobalt (Co)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Copper (Cu)	mg/spl	S/A	0.06	-	-	-	-	-	-
Manganese (Mn)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Nickel (Ni)	mg/spl	S/A	<0.01	-	-	-	-	-	-
Vanadium (V)	mg/spl	S/A	0.01	-	-	-	-	-	-

Note:

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81600 Kota Tinggi,
Johor Darul Takzim.
Date Sample Received : 25th August 2017
Date of Monitoring : 24th August 2017
Type of sample : Ambient Air Monitoring
Sample Description : Received seven (7) samples labeled as:
Marking : "A": PM10(A)-CJSB(A3)-17(1)
"B": PM2.5(A)-CJSB(A3)-17(1)
"C": HO(A)-CJSB(A3)-17(1)
"D": 3M(A)-CJSB(A3)-17(1)
"E": OZONE(A)-CJSB(A3)-17(1)

ANALYSIS RESULT

Parameter	Unit	*Status	Results				
			A	B	C	D	E
Dust/Particulate	g/spl	S/A	0.0513	-	-	-	-
Dust/Particulate	g/spl	S/A	-	0.0001	-	-	-
Sulphate (H ₂ SO ₄)	mg/spl	S/A	-	-	0.17	-	-
Nitrogen Dioxide (NO ₂)	mg/spl	S/A	-	-	-	<0.01	-
Ozone	μL/10ml	S/A	-	-	-	-	ND (<0.1)

Note:

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UKAS accredited testing laboratory No. 1668

Name of Client : AMR Environmental Sdn Bhd

Test Certificate No: 117-3653

Address : 29 & 29A, Jalan Pulau Perdana 11, Taman Sri Pulau Perdana,
81110 Johor Bahru, Malaysia.

ANALYSIS OF PCDDs and PCDFs

Job Reference: 0
Sample Identifier : DF(A)-CJSB/E1A(A3)-17-(1)
Sample No: 117-3653
Order No: 0
Sample Type: Unknown
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 290817

Date of Receipt : 29/08/17
Date of Analysis : 30/08/17
Date of Report : 31/08/17

Test Method : 2002
Blank : 240817
Sample size: 1

expressed as ng /sample

Congener	Conc	TEFs	TEQ ¹	TEQ ²	DL	Rec %
2378-TCDF	*	0.1000	0.0033	0.0000	0.033	87
12378-PCDF	*	0.0300	0.0014	0.0000	0.046	96
23478-PCDF	*	0.3000	0.0121	0.0000	0.040	104
123478-HxCDF	*	0.1000	0.0049	0.0000	0.049	97
123678-HxCDF	*	0.1000	0.0047	0.0000	0.047	96
234678-HxCDF	*	0.1000	0.0048	0.0000	0.048	99
123789-HxCDF	*	0.1000	0.0059	0.0000	0.059	98
1234678-HpCDF	0.034	0.0100	0.0003	0.0003	0.026	100
1234789-HpCDF	*	0.0100	0.0004	0.0000	0.036	98
OCDF	0.31	0.0003	0.0001	0.0001	0.224	
2378-TCDD	*	1.0000	0.0361	0.0000	0.036	88
12378-PCDD	*	1.0000	0.0565	0.0000	0.057	105
123478-HxCDD	*	0.1000	0.0076	0.0000	0.076	100
123678-HxCDD	*	0.1000	0.0079	0.0000	0.079	100
123789-HxCDD	*	0.1000	0.0083	0.0000	0.083	
1234678-HpCDD	0.47	0.0100	0.0047	0.0047	0.043	99
OCDD	*	0.0003	0.0001	0.0000	0.434	85
TEQ (WHO-2005)			0.159	0.00514		

* Isomer Not detected
TEQ Toxic Equivalent Value
TEF Toxic Equivalent Factor
Conc Concentration
DL Detection Value
REC Recovery

TEQ¹ Concentration of Non Detected
Congeners at Detection Limit
TEQ² Concentration of Non Detected
Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : *Karl Pettit*