

ภาคผนวก ค

ใบรับรองผลการวิเคราะห์

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492807
Date Received : Aug 23, 2024
Date Reported : Aug 29, 2024
Report Number: 3080833-1

Page 1 of 1

Sample Description		Air Quality							
Location	Parameter	สถานีวัดห้วย (GPS 47P 0729830, 1403321) Nitrogen dioxide (ppm)							
Measurement Date	Measurement by	Aug 16, 2024 - Aug 23, 2024 Sipawit Suwannarat							
Time		2492807-1 Aug 16, 2024	2492807-2 Aug 17, 2024	2492807-3 Aug 18, 2024	2492807-4 Aug 19, 2024	2492807-5 Aug 20, 2024	2492807-6 Aug 21, 2024	2492807-7 Aug 22, 2024	
01:00 PM - 02:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
02:00 PM - 03:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
03:00 PM - 04:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
04:00 PM - 05:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
05:00 PM - 06:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
06:00 PM - 07:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
07:00 PM - 08:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
08:00 PM - 09:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
09:00 PM - 10:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
10:00 PM - 11:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
11:00 PM - 12:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
12:00 AM - 01:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
01:00 AM - 02:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
02:00 AM - 03:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
03:00 AM - 04:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
04:00 AM - 05:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
05:00 AM - 06:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
06:00 AM - 07:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
07:00 AM - 08:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
08:00 AM - 09:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
09:00 AM - 10:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
10:00 AM - 11:00 AM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
11:00 AM - 12:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
12:00 PM - 01:00 PM		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Average		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
1hr - Maximum		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Standard 1hr - Average		0.170	0.170	0.170	0.170	0.170	0.170	0.170	
Standard		: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).							0.170
Reference Method		: US EPA Method Part 50 App. F (Chemiluminescence)							

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Orawan R.

Approved by

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492807
Date Received : Aug 23, 2024
Date Reported : Aug 29, 2024
Report Number: 3096502-1

Page 1 of 1

Sample Description Location Parameter Measurement Date Measurement by	Air Quality สารพิษ (GPS 47P 0730831, 1407365) Nitrogen dioxide (ppm) Aug 16, 2024 - Aug 23, 2024 Sipawit Suwannarat		2492807-8 Aug 16, 2024		2492807-9 Aug 17, 2024		2492807-10 Aug 18, 2024		2492807-11 Aug 19, 2024		2492807-12 Aug 20, 2024		2492807-13 Aug 21, 2024		2492807-14 Aug 22, 2024	
	Time		Time		Time		Time		Time		Time		Time		Time	
	02:00 PM - 03:00 PM		0.006		0.008		0.019		0.003		0.002		0.002		0.003	
	03:00 PM - 04:00 PM		0.001		0.026		0.045		0.004		0.003		0.001		0.003	
	04:00 PM - 05:00 PM		0.004		0.010		0.036		0.004		0.003		0.001		0.003	
	05:00 PM - 06:00 PM		0.005		0.024		0.011		0.007		0.003		0.002		0.003	
	06:00 PM - 07:00 PM		0.005		0.021		0.006		0.009		0.004		0.002		0.002	
	07:00 PM - 08:00 PM		0.006		0.006		0.004		0.006		0.003		0.002		0.002	
	08:00 PM - 09:00 PM		0.008		0.003		0.002		0.004		0.003		0.002		0.005	
	09:00 PM - 10:00 PM		0.012		0.005		0.002		0.005		0.002		0.002		0.002	
	10:00 PM - 11:00 PM		0.004		0.004		0.002		0.007		0.002		0.003		0.001	



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 2492808
Date Received : Aug 23, 2024
Date Reported : Aug 29, 2024
Report Number: 3080834-1

Page 1 of 1

Sample Description	Air Quality	Total Suspended Particulate (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	ท่าเรืออุตสาหกรรม (GPS 47° 07'29.830", 140°33'21")			
Date Analysis Commenced	Aug 24, 2024			
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag			
Sample Number	Sampled Date			
2492808-1	Aug 15 - Aug 17, 2024	0.045	755	32
2492808-2	Aug 17 - Aug 18, 2024	0.018	755	31
2492808-3	Aug 13 - Aug 19, 2024	0.013	755	30
2492808-4	Aug 13 - Aug 20, 2024	0.017	755	30
2492808-5	Aug 21 - Aug 21, 2024	0.027	755	30
2492808-6	Aug 21 - Aug 22, 2024	0.025	755	30
2492808-7	Aug 22 - Aug 23, 2024	0.019	755	31
Guideline		0.33	-	-
Reference Method	Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B			
Guideline :	Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004			
Sampled By :	Sitpawit Suwannarat			
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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6403-32 / BAIL

S:\Report_Air Ambient\Days_1.rpt (8:35AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 2492808
Date Received : Aug 23, 2024
Date Reported : Aug 29, 2024
Report Number: 3080834-2

Page 1 of 1

Sample Description	Air Quality	Total Suspended Particulate (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	ท่าเรืออุตสาหกรรม (GPS 47° 07'29.831", 140°36'55")			
Date Analysis Commenced	Aug 24, 2024			
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag			
Sample Number	Sampled Date			
2492808-8	Aug 16 - Aug 17, 2024	0.065	755	32
2492808-9	Aug 17 - Aug 18, 2024	0.043	755	31
2492808-10	Aug 18 - Aug 19, 2024	0.032	755	30
2492808-11	Aug 19 - Aug 20, 2024	0.059	755	30
2492808-12	Aug 20 - Aug 21, 2024	0.066	755	30
2492808-13	Aug 21 - Aug 22, 2024	0.032	755	30
2492808-14	Aug 22 - Aug 23, 2024	0.056	755	31
Guideline		0.33	-	-
Reference Method	Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B			
Guideline :	Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004			
Sampled By :	Sitpawit Suwannarat			
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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S:\Report_Air Ambient\Days_1.rpt (8:35AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 2492811
Date Received :Aug 23, 2024
Date Reported :Aug 29, 2024
Report Number :3080837-1

P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Sample Number : 2492811-1 to 7

Parameter : Wind Speed / Wind Direction
Location : จันทราวิบูลย์ (GPS 47P 0729830, 1403321)
Sampling Date : Aug 16 - Aug 23, 2024
Sampling by : Sitapatt Suwananarat

Time	Aug 16 - Aug 17, 2024	Aug 17 - Aug 18, 2024	Aug 18 - Aug 19, 2024	Aug 19 - Aug 20, 2024	Aug 20 - Aug 21, 2024	Aug 21 - Aug 22, 2024	Aug 22 - Aug 23, 2024
WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
01:00 PM - 02:00 PM	0.4 331.0 NNW	0.5 172.0 S	0.5 21.0 NNE	0.3 237.0 WSW	0.3 305.0 NW	0.3 279.0 W	0.8 291.0 WNW
02:00 PM - 03:00 PM	0.5 157.0 SSE	0.6 234.0 SW	0.6 279.0 W	0.4 276.0 W	0.4 225.0 SW	0.6 242.0 WSW	0.6 285.0 WNW
03:00 PM - 04:00 PM	0.4 255.0 WSW	0.7 191.0 S	0.6 151.0 SSE	0.6 281.0 W	1.7 287.0 WNW	0.6 268.0 W	1.2 262.0 W
04:00 PM - 05:00 PM	0.5 274.0 W	0.7 131.0 SE	0.3 298.0 WNW	0.6 207.0 SSW	1.1 296.0 WNW	0.4 255.0 WSW	0.8 290.0 WNW
05:00 PM - 06:00 PM	0.4 246.0 WSW	1.0 227.0 S	3.8 178.0 S	0.4 268.0 W	0.4 287.0 WNW	0.3 208.0 SSW	1.8 225.0 SW
06:00 PM - 07:00 PM	0.4 169.0 S	0.3 198.0 SSW	1.8 140.0 SE	0.1 -	0.7 273.0 W	0.3 309.0 NW	1.0 209.0 SSW
07:00 PM - 08:00 PM	0.8 237.0 WSW	0.9 204.0 SSW	0.3 163.0 SSE	1.3 244.0 WSW	0.3 280.0 W	0.3 322.0 NW	1.1 206.0 SSW
08:00 PM - 09:00 PM	0.3 155.0 SSE	0.9 124.0 SE	0.6 273.0 W	0.3 272.0 W	0.3 260.0 W	0.9 286.0 WNW	0.3 265.0 W
09:00 PM - 10:00 PM	0.3 286.0 WNW	0.5 149.0 SSE	0.6 275.0 W	0.3 217.0 SW	0.5 290.0 WNW	0.8 296.0 WNW	0.3 264.0 W
10:00 PM - 11:00 PM	0.4 175.0 S	0.3 242.0 WSW	0.5 249.0 WSW	0.4 188.0 S	0.6 276.0 W	0.3 296.0 WNW	0.7 197.0 SSW
11:00 PM - 12:00 AM	0.9 271.0 W	0.5 238.0 WSW	0.3 270.0 W	0.5 181.0 S	0.5 288.0 WNW	1.2 297.0 WNW	0.6 292.0 WNW
12:00 AM - 01:00 AM	0.6 250.0 WSW	0.6 274.0 W	1.1 269.0 W	0.6 299.0 WNW	0.3 237.0 WSW	0.3 297.0 WNW	0.5 293.0 WNW
01:00 AM - 02:00 AM	0.6 278.0 W	0.3 270.0 W	0.9 292.0 WNW	0.3 193.0 SSW	0.3 287.0 WNW	0.3 298.0 WNW	1.1 245.0 WSW
02:00 AM - 03:00 AM	0.5 225.0 SW	0.3 272.0 W	0.5 281.0 W	1.0 280.0 W	0.9 346.0 NNE	0.6 268.0 W	0.8 235.0 SW
03:00 AM - 04:00 AM	0.3 290.0 WNW	0.5 248.0 WSW	1.2 244.0 WSW	0.9 315.0 NW	0.7 275.0 W	0.3 232.0 SW	0.3 299.0 WNW
04:00 AM - 05:00 AM	0.3 277.0 W	0.5 300.0 WNW	1.7 227.0 SW	0.3 290.0 WNW	1.0 0.0 N	0.3 249.0 WSW	0.3 275.0 W
05:00 AM - 06:00 AM	1.0 276.0 W	0.8 278.0 W	0.3 286.0 WNW	0.6 252.0 WSW	0.6 7.0 N	0.6 277.0 W	0.3 256.0 WSW
06:00 AM - 07:00 AM	0.9 278.0 W	0.8 272.0 W	0.3 274.0 W	0.5 342.0 NNE	0.3 7.0 N	0.3 129.0 SE	0.6 293.0 WSW
07:00 AM - 08:00 AM	0.4 250.0 WSW	0.6 217.0 SW	0.7 285.0 WNW	0.3 341.0 NNE	0.3 7.0 N	0.5 275.0 W	0.9 266.0 W
08:00 AM - 09:00 AM	0.3 157.0 SSE	0.4 261.0 W	0.3 285.0 WNW	0.5 341.0 NNE	0.5 7.0 N	0.6 47.0 NE	0.6 252.0 WSW
09:00 AM - 10:00 AM	0.3 146.0 SE	0.9 166.0 SSE	0.3 290.0 WNW	0.6 341.0 NNE	0.8 7.0 N	0.5 309.0 NW	0.8 252.0 WSW
10:00 AM - 11:00 AM	0.6 144.0 SE	0.7 139.0 SE	0.4 272.0 W	0.9 311.0 NW	0.4 339.0 WNW	0.5 258.0 WSW	1.1 306.0 NW
11:00 AM - 12:00 PM	0.3 287.0 WNW	0.3 176.0 S	0.5 274.0 W	0.3 272.0 W	0.3 294.0 WNW	2.7 276.0 W	0.3 307.0 NW
12:00 PM - 01:00 PM	0.5 186.0 S	0.4 246.0 WSW	0.5 277.0 W	0.5 260.0 W	0.3 302.0 WNW	0.3 274.0 W	0.4 310.0 NW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) as always recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont
Assistant General Manager

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Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

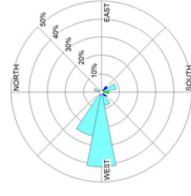
Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 2492811
Date Received :Aug 23, 2024
Date Reported :Aug 29, 2024
Report Number :3080837-1

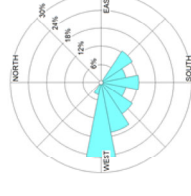
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Page 2 of 2

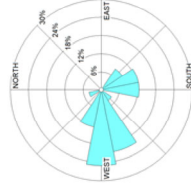
Wind Rose



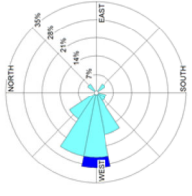
Date : Aug 16-17, 2024



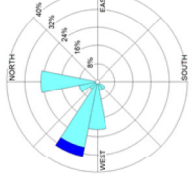
Date : Aug 17-18, 2024



Date : Aug 18-19, 2024



Date : Aug 20-21, 2024



Date : Aug 21-22, 2024



Date : Aug 22-23, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	2.98
0.3-1.7	95.83
Calms	0.60

คุณภาพอากาศจากปล่องระบาย



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492760
Date Received : Aug 19, 2024
Date Reported : Sep 03, 2024
Report Number : 3080797-1

Page 1 of 1

Sample Number	2492760-1
Sample Description	Emission from Stationary Source
Location	HRSG #1 (GPS 477 0730860, 1405083)
Measurement Date	Aug 19, 2024

Stack Description			
Ambient Temperature	33 °C	Diameter	3.30 m
Ambient Pressure	755.5 mmHg	Shape	Circle
Type of Process	Combustion	Stack Temperature	154 °C
Type of Fuel	Natural Gas	Moisture	8.27 %
		Flow Rate	412906 Nm ³ /hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂	At 7% O ₂
1	11:30 AM - 11:50 AM	14.32	4.25	6.79	14.36
2	11:51 AM - 12:11 PM	14.31	4.25	6.76	14.25
3	12:12 PM - 12:32 PM	14.32	4.25	6.70	14.16
Average (ppm)		14.32	4.25	6.75	14.25
Guideline ^{1/} (ppm)				-	35
Guideline ^{2/} (ppm)				-	120
Guideline ^{3/} (ppm)				-	120
Result (mg/Nm ³)				12.70	26.81
Emission rate at Actual O ₂ (g/s)				1.4563	
Guideline ^{4/} (g/s)				3.55	
Method				US EPA Method 7E	

Sampled By :
Guideline :

Sathaporn Thakraw
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choonharat
Wichan Choonharat
Manager
โทรศัพท์ ๓-204-๙-0006

Approved by

Sarayuth Jitrantorn
Sarayuth Jitrantorn
Assistant General Manager
โทรศัพท์ ๓-204-๙-0003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Sample Number : 2492764-1
Sampled Date : Aug 19, 2024
Sample Description : Emission from Stationary Source
Location : HRSG #1
Date Analysis Commenced : Aug 20, 2024
Condition of Sample : Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description

Ambient Pressure	756 mmHg	Diameter	3.30 m	Oxygen	14.3 %
Ambient Temperature	33.0 °C	Shape	Circle	Carbon Dioxide	4.2 %
Type of Process	Combustion	Stack Temperature	154 °C	Gas Velocity	21.1 m/s
Type of Fuel	Natural Gas	Moisture	8.24 %	Flow Rate (Actual O ₂)	413512 Nm ³ /hr

Analyte	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂ at 14.3 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
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Air Testing								
Total Suspended Particulate	11:30 AM - 12:18 PM	mg/m ³	0.5	<0.5	<0.5	60	3.20	United States Environmental Protection Agency, EPA Method 5

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management

Thanita Kulsuriwong
Thanita Kulsuriwong
Scientist (4)
โทรศัพท์ ๓-323-๙-0029

Approved by

Dej Changdon
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S:\Reports_Air Stack_02_SGL.rpt (2:59PM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : 92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name : Monitoring
Project Location : CUP 1
Lot ID: 2492761
Date Received : Aug 19, 2024
Date Reported : Sep 03, 2024
Report Number : 3080796-1

Page 1 of 1

Sample Number : 2492761-1

Sample Description : Emission from Stationary Source
Location : HRSG #2 (GPS 47P 0730833, 1405040)
Measurement Date : Aug 19, 2024

		Stack Description							
Ambient Temperature	33	°C		Diameter	3.30	m	Oxygen	14.70	%
Ambient Pressure	755.5	mmHg		Shape	Circle		Carbon dioxide	3.93	%
Type of Process	Combustion			Stack Temperature	158	°C	Gas Velocity	20.19	m/s
Type of Fuel	Natural Gas			Moisture	9.62	%	Flow Rate	385771	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂ At 7% O ₂
1	01:00 PM - 01:20 PM	14.71	3.99	8.15
2	01:21 PM - 01:41 PM	14.70	3.99	8.07
3	01:42 PM - 02:02 PM	14.69	3.81	8.04
Average (ppm)		14.70	3.93	8.09
Guideline ^{1/} (ppm)				35
Guideline ^{2/} (ppm)				120
Guideline ^{3/} (ppm)				120
Result (mg/Nm ³)				15.21
Emission Rate at Actual O ₂ (g/s)				34.10
Guideline ^{4/} (g/s)				1.6302
Method				3.55
				US EPA Method 7E

Sampled By : Sathaporn Thakraw
Guideline : ^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choorharat
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Approved by

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2492764

Date Received : Aug 19, 2024
Date Reported : Aug 24, 2024
Report Number : 3080807-1

Page 2 of 2

Sample Number : 2492764-1

Sample Date : Aug 19, 2024

Sample Description : Emission from Stationary Source
Location : HRSG #1

Date Analysis Commenced : Aug 20, 2024

Condition of Sample : Extracted into one filter paper placed in plastic petri dish and one plastic bottle

		Stack Description						
Ambient Pressure	756	mmHg	Diameter	3.30	m	Oxygen	14.3	%
Ambient Temperature	33.0	°C	Shape	Circle		Carbon Dioxide	4.2	%
Type of Process	Combustion		Stack Temperature	154	°C	Gas Velocity	21.1	m/s
Type of Fuel	Natural Gas		Moisture	8.24	%	Flow Rate (Actual O2)	413512	Nm3/hr

Analyte	Sampled Time	Unit	LOD (LOR)	Result	Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----------	--------	---------------	---------------	---------------	--------	------------------

Air Testing									
Total Suspended Particulate	11:36 AM - 12:18 PM	g/s	-	<0.057	-	0.40	Calculated		Rayong
*									

Guideline :

Guideline (1) : Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)

Sampling By : Tinnakorn Kulchart โทรศัพท์ ๖-323-๙-0062 , Sathaporn Thakraw โทรศัพท์ ๖-323-๙-0036

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

Thanitak
Thanita Kulsiwong
Scientist (4)
โทรศัพท์ ๖-323-๙-0029

Approved by

D. Chuan
Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-0001

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Analysis / Test Report

Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492765
Date Received : Aug 19, 2024
Date Reported : Aug 24, 2024
Report Number: 3080803-1

TESTING
No.0042

Lot ID: 2492765
Date Received : Aug 19, 2024
Date Reported : Aug 24, 2024
Report Number: 3080803-1

Page 1 of 2

Page 2 of 2

Sample Number 2492765-1

Sampled Date Aug 19, 2024

Sample Description Emission from Stationary Source

Location HRSG #2 (GPS 47P 730833, 1405040)

Date Analysis Commenced Aug 20, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Sample Number 2492765-1

Sampled Date Aug 19, 2024

Sample Description Emission from Stationary Source

Location HRSG #2 (GPS 47P 730833, 1405040)

Date Analysis Commenced Aug 20, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description									
Ambient Pressure	756	mmHg	Diameter	3.30	m	Oxygen	14.7	%	
Ambient Temperature	33.0	°C	Shape	Circle		Carbon Dioxide	3.9	%	
Type of Process	Combustion		Stack Temperature	158	°C	Gas Velocity	20.2	m/s	
Type of Fuel	Natural Gas		Moisture	9.62	%	Flow Rate (Actual O2)	386500	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ (LOR)	Result at 7% O ₂	Guideline (1)	Guideline (2)	Method	Testing Location	

Stack Description									
Ambient Pressure	756	mmHg	Diameter	3.30	m	Oxygen	14.7	%	
Ambient Temperature	33.0	°C	Shape	Circle		Carbon Dioxide	3.9	%	
Type of Process	Combustion		Stack Temperature	158	°C	Gas Velocity	20.2	m/s	
Type of Fuel	Natural Gas		Moisture	9.62	%	Flow Rate (Actual O2)	386500	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location	

Air Testing									
Total Suspended Particulate	01:00 PM - 01:42 PM	mg/m3	0.5	<0.5	60	3.20	United States Environmental Protection Agency, EPA Method 5	Rayong	

Air Testing									
Total Suspended Particulate	01:00 PM - 01:42 PM	g/s	-	-	-	0.40	Calculated	Rayong	

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Sampling By : Sawai Tonpho รหัสพนักงาน 7-323-0-0046, Jittakorn Sriwasa รหัสพนักงาน 7-323-0-0007

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492796
Date Received : Aug 20, 2024
Date Reported : Sep 03, 2024
Report Number : 3080825-1

Page 1 of 1

Sample Number	2492796-1
Sample Description	Emission from Stationary Source
Location	HRSG #3 (GPS 477 0730810, 1404999)
Measurement Date	Aug 20, 2024

	Stack Description			
	34 °C	3.30 m	Oxygen	14.09 %
Ambient Temperature	755.3 mmHg	Circle	Carbon dioxide	4.44 %
Ambient Pressure	Combustion	Stack Temperature	Gas Velocity	18.09 m/s
Type of Process	Natural Gas	Moisture	Flow Rate	379158 Nm ³ /hr
Type of Fuel				

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂	At 7% O ₂
1	10:30 AM - 10:50 AM	14.10	4.43	8.23	16.63
2	10:51 AM - 11:11 AM	14.09	4.45	8.26	16.85
3	11:12 AM - 11:32 AM	14.07	4.45	8.36	17.01
Average (ppm)		14.09	4.44	8.28	16.90
Guideline ^{1/} (ppm)				-	48
Guideline ^{2/} (ppm)				-	120
Guideline ^{3/} (ppm)				-	120
Result (mg/Nm ³)				15.58	31.79
Emission rate at Actual O ₂ (g/s)				1.6411	
Guideline ^{4/} (g/s)				5.07	
Method				US EPA Method 7E	

Sampled By :

Sathaporn Thakraw
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choonharat
Wichan Choonharat
Manager
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Approved by

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 2492801

Date Received : Aug 20, 2024
Date Reported : Aug 28, 2024
Report Number: 3080831-1

Page 1 of 2

Sample Number	2492801-1
Sampled Date	Aug 20, 2024
Sample Description	Emission from Stationary Source
Location	HRSG #3 (GPS 477 730810, 1404999)
Date Analysis Commenced	Aug 21, 2024
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle and one amber plastic bottle, refrigerated

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 % O ₂	at 14.1 % O ₂				
Stack Description										
Ambient Pressure	755	mmHg	Diameter			3.30	m	Oxygen		14.1 %
Ambient Temperature	34.0	°C	Shape			Circle		Carbon Dioxide		4.4 %
Type of Process	Combustion		Stack Temperature			120	°C	Gas Velocity		18.0 m/s
Type of Fuel	Natural Gas		Moisture			9.53	%	Flow Rate (Actual O ₂)		378768 Nm ³ /hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂ at 14.1 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate	10:30 AM - 11:12 AM	mg/m ³	-	0.5	<0.5	<0.5	60	3.00	United States Environmental Protection Agency, EPA Method 5

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : 92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name : Monitoring
Project Location : CUP 1
Lot ID: 2492797
Date Received : Aug 20, 2024
Date Reported : Sep 03, 2024
Report Number : 3080824-1

Page 1 of 1

Sample Number : 2492797-1
Sample Description : Emission from Stationary Source
Location : HRSG #4 (GPS 47P 0730798, 1404983)
Measurement Date : Aug 20, 2024

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)	
				at Actual O ₂	at 7% O ₂
1	10:20 AM - 10:40 AM	14.81	3.62	8.07	18.41
2	10:41 AM - 11:01 AM	14.80	3.63	8.27	18.84
3	11:02 AM - 11:22 AM	14.82	3.62	8.22	18.79
Average (ppm)		14.81	3.63	8.19	18.68
Guideline ^{1/} (ppm)				-	32
Guideline ^{2/} (ppm)				-	120
Guideline ^{3/} (ppm)				-	120
Result (mg/Nm ³)				15.40	35.14
Emission Rate at Actual O ₂ (g/s)					1.9121
Guideline ^{4/} (g/s)					2.84
Method				US EPA Method 7E	

Sampled By :
Guideline :

Boonyarath Jamtad
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choorharat
Wichan Choorharat
Manager
โทร: 09-0000-204-0006

Approved by

Sarayuht Jitrarant
Sarayuht Jitrarant
Assistant General Manager
โทร: 09-0000-204-0003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : 92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name : Monitoring
Project Location : CUP 1
Lot ID: 2492801
Date Received : Aug 20, 2024
Date Reported : Aug 28, 2024
Report Number : 3080831-1

Page 2 of 2

Sample Number : 2492801-1
Sample Date : Aug 20, 2024
Sample Description : Emission from Stationary Source
Location : HRSG #3 (GPS 47P 730810, 1404999)
Date Analysis Commenced : Aug 21, 2024
Condition of Sample : Extracted into one filter paper placed in plastic petri dish and one plastic bottle and one amber plastic bottle, refrigerated

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)	
				at Actual O ₂	at 7% O ₂
1	10:20 AM - 10:40 AM	14.81	3.62	8.07	18.41
2	10:41 AM - 11:01 AM	14.80	3.63	8.27	18.84
3	11:02 AM - 11:22 AM	14.82	3.62	8.22	18.79
Average (ppm)		14.81	3.63	8.19	18.68
Guideline ^{1/} (ppm)				-	32
Guideline ^{2/} (ppm)				-	120
Guideline ^{3/} (ppm)				-	120
Result (mg/Nm ³)				15.40	35.14
Emission Rate at Actual O ₂ (g/s)					1.9121
Guideline ^{4/} (g/s)					2.84
Method				US EPA Method 7E	

Analyte : Ambient Pressure 755 mmHg
Stack Description : Diameter 3.30 m
Result : Oxygen 14.1 %
LOQ (LOR) : Circle 4.4 %
Method : Carbon Dioxide 4.4 %
Guideline (1) : Stack Temperature 120 °C
Guideline (2) : Gas Velocity 18.0 m/s
Testing Location : Flow Rate (Actual O₂) 378768 Nm³/hr

Air Testing : Total Suspended Particulate 10:30 AM - 11:12 AM g/s - - - - - 0.40 Calculated Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)

Sampling By : Sittipon Sanachaiw โทร: 09-0000-323-0009, Sattaporn Thakarn โทร: 09-0000-323-0036

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

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โทร: 09-0000-323-0029

Approved by

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Senior Manager
โทร: 09-0000-323-0001

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042

Lot ID: 2492802
Date Received : Aug 20, 2024
Date Reported : Aug 28, 2024
Report Number: 3080830-1

Page 1 of 2

Sample Number 2492802-1
Sampled Date Aug 20, 2024
Sample Description Emission from Stationary Source
Location HRSG #4
Date Analysis Commenced Aug 21, 2024
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle, refrigerated

Stack Description									
Ambient Pressure	755	mmHg	Diameter	3.30	m	Oxygen	14.8	%	
Ambient Temperature	34.0	°C	Shape	Circle		Carbon Dioxide	3.6	%	
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	21.4	m/s	
Type of Fuel	Natural Gas		Moisture	10.12	%	Flow Rate (Actual O2)	443524	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ (LOR)	Result at 7% O ₂ at 14.8 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location	

Air Testing									
Total Suspended Particulate	10:20 AM - 11:08 AM	mg/m3	0.5	<0.5	<0.5	60	3.60	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management

Thanita Kulsuriwong
Scientist (4)
หมายเลข 7-323-4-0029

Approved by

Dej Changchon
Senior Manager
หมายเลข 7-323-4-0001

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S:\Reports_L\Air Stack_O2_26L.rpt (12:59PM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042

Lot ID: 2492802
Date Received : Aug 20, 2024
Date Reported : Aug 28, 2024
Report Number: 3080830-1

Page 2 of 2

Sample Number 2492802-1
Sampled Date Aug 20, 2024
Sample Description Emission from Stationary Source
Location HRSG #4
Date Analysis Commenced Aug 21, 2024
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle and one amber plastic bottle, refrigerated

Stack Description									
Ambient Pressure	755	mmHg	Diameter	3.30	m	Oxygen	14.8	%	
Ambient Temperature	34.0	°C	Shape	Circle		Carbon Dioxide	3.6	%	
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	21.4	m/s	
Type of Fuel	Natural Gas		Moisture	10.12	%	Flow Rate (Actual O2)	443524	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location	

Air Testing									
Total Suspended Particulate	10:20 AM - 11:08 AM	g/s	-	<0.062	-	0.40	Calculated		Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)
Sampling By : Sittipan Sarachiw หมายเลข 7-323-4-0009 , Tinnakorn Kulchart หมายเลข 7-323-4-0062

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

Thanita Kulsuriwong
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หมายเลข 7-323-4-0029

Approved by

Dej Changchon
Senior Manager
หมายเลข 7-323-4-0001

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492798

Date Received : Aug 21, 2024
Date Reported : Sep 03, 2024
Report Number : 3080819-1

Page 1 of 1

Sample Number	2492798-1
Sample Description	Emission from Stationary Source
Location	HRSG #5 (GPS 47P 730892, 1405132)
Measurement Date	Aug 21, 2024

Stack Description					
Ambient Temperature	31.6 °C	Diameter	3.30 m	Oxygen	15.00 %
Ambient Pressure	754.5 mmHg	Shape	Circle	Carbon dioxide	3.54 %
Type of Process	Combustion	Stack Temperature	176 °C	Gas Velocity	16.38 m/s
Type of Fuel	Natural Gas	Moisture	9.63 %	Flow Rate	299841 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂	At 7% O ₂
1	10:30 AM - 10:50 AM	14.99	3.55	5.24	12.33
2	10:51 AM - 11:11 AM	15.00	3.54	4.74	11.17
3	11:12 AM - 11:32 AM	15.02	3.53	5.39	12.75
Average (ppm)		15.00	3.54	5.13	12.08
Guideline ^{1/} (ppm)				-	20
Guideline ^{2/} (ppm)				-	120
Guideline ^{3/} (ppm)				-	120
Result (mg/Nm ³)				9.64	22.73
Emission rate at Actual O ₂ (g/s)					0.8033
Guideline ^{4/} (g/s)					2.82
Method					US EPA Method 7E

Sampled By :
Guideline :

Boonyarit Iamted
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choonharat
Wichan Choonharat
Manager
เบอร์โทร 7-204-8-0006

Approved by

Sarayuth Jitrantorn
Sarayuth Jitrantorn
Assistant General Manager
เบอร์โทร 7-204-8-0003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042

Lot ID: 2492803

Date Received : Aug 21, 2024
Date Reported : Aug 29, 2024
Report Number: 3080827-1

Page 1 of 2

Sample Number	2492803-1
Sample Date	Aug 21, 2024
Sample Description	Emission from Stationary Source
Location	HRSG #5 (GPS 47P 730892, 1405132)
Date Analysis Commenced	Aug 22, 2024
Condition of Sample	Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description						
Ambient Pressure	754 mmHg	Diameter	3.30 m	Oxygen	15.0 %	
Ambient Temperature	31.6 °C	Shape	Circle	Carbon Dioxide	3.5 %	
Type of Process	Combustion	Stack Temperature	176 °C	Gas Velocity	16.4 m/s	
Type of Fuel	Natural Gas	Moisture	9.67 %	Flow Rate (Actual O ₂)	300090 Nm ³ /hr	
Analysite	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method
					at 7 % O ₂ , at 15.0 % O ₂	Guideline (1) Guideline (2)
						Testing Location

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂ at 15.0 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate	10:30 AM - 11:18 AM	mg/m ³	-	0.5	<0.5	<0.5	60	2.30	United States Environmental Protection Agency, EPA Method 5

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management

Thanita Kulsuriwong
Thanita Kulsuriwong
Scientist (4)
เบอร์โทร 7-323-8-0029

Approved by

Dej Changdon
Dej Changdon
Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : 92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name : Monitoring
Project Location : CUP 1
Lot ID: 2492799
Date Received : Aug 21, 2024
Date Reported : Sep 03, 2024
Report Number : 3080817-1

Page 1 of 1

Sample Number : 2492799-1
Sample Description : Emission from Stationary Source
Location : HRSG #6 (GPS 47P 0730759, 1405004)
Measurement Date : Aug 21, 2024

		Stack Description									
Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂	At 7% O ₂	Oxygen	Carbon dioxide	%			
1	10:30 AM - 10:50 AM	14.32	4.27	4.37	9.23	14.32	4.26	%			
2	10:51 AM - 11:11 AM	14.31	4.26	4.37	9.22	23.36	23.36	m/s			
3	11:12 AM - 11:32 AM	14.32	4.26	4.40	9.30	432123	432123	Nm ³ /hr			
Average (ppm)		14.32	4.26	4.38	9.25						
Guideline ^{1/} (ppm)				-	20						
Guideline ^{2/} (ppm)				-	120						
Guideline ^{3/} (ppm)				-	120						
Result (mg/Nm ³)				8.24	17.40						
Emission Rate at Actual O ₂ (g/s)					0.9893						
Guideline ^{4/} (g/s)					2.82						
Method					US EPA Method 7E						

Sampled By : Sathaporn Thakraw
Guideline :
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choorharat
Wichan Choorharat
Manager
โทร: 09-0000-204-00006

Approved by

Sarayuht Jitraront
Sarayuht Jitraront
Assistant General Manager
โทร: 09-0000-204-00003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : 92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name : Monitoring
Project Location : CUP 1
Lot ID: 2492803
Date Received : Aug 21, 2024
Date Reported : Aug 29, 2024
Report Number : 3080827-1

Page 2 of 2

Sample Number : 2492803-1
Sample Date : Aug 21, 2024
Sample Description : Emission from Stationary Source
Location : HRSG #5 (GPS 47P 730852, 1405132)
Date Analysis Commenced : Aug 22, 2024
Condition of Sample : Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

		Stack Description									
Analyte	Sampled Time	Unit	LOD (LOR)	Result	Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location		
Ambient Pressure	754	mmHg		3.30		m		Oxygen	15.0	%	
Ambient Temperature	31.6	°C		Circle				Carbon Dioxide	3.5	%	
Type of Process	Combustion			Stack Temperature	176	°C		Gas Velocity	16.4	m/s	
Type of Fuel	Natural Gas			Moisture	9.67	%		Flow Rate (Actual O ₂)	300090	Nm ³ /hr	

Air Testing	Total Suspended Particulate	10:30 AM - 11:18 AM	g/s	-	<0.042	-	0.40	Calculated	Rayong
*									

Guideline :
Guideline (1) : Notification of the Ministry of Industry or determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
Sampling By : Sittiporn Sanachaiw โทร: 09-0000-323-0009, Sathaporn Thakraw โทร: 09-0000-323-0036

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

Thanitak
Thanitak Kulsriwong
Scientist (4)
โทร: 09-0000-323-0029

Approved by

D. Chanchon
Dej Chanchon
Senior Manager
โทร: 09-0000-323-0001

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S:\Report\jr Stack_02_26L.mr (9:51AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492804
Date Received : Aug 21, 2024
Date Reported : Aug 29, 2024
Report Number: 3080828-1

Page 1 of 2

Sample Number	2492804-1	
Sampled Date	Aug 21, 2024	
Sample Description	Emission from Stationary Source	
Location	HRSG #6 (GPS 47P 0730759, 1405004)	
Date Analysis Commenced	Aug 22, 2024	
Condition of Sample	Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated	

Stack Description									
Ambient Pressure	754	mmHg	Diameter	3.30	m	Oxygen	14.3	%	
Ambient Temperature	31.6	°C	Shape	Circle		Carbon Dioxide	4.3	%	
Type of Process	Combustion		Stack Temperature	176	°C	Gas Velocity	23.4	m/s	
Type of Fuel	Natural Gas		Moisture	8.68	%	Flow Rate (Actual O2)	432844	Nm3/hr	
Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7% O ₂ at 14.3 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location

Air Testing									
Total Suspended Particulate	10:30 AM - 11:12 AM	mg/m3	-	0.5	<0.5	<0.5	60	2.30	United States Environmental Protection Agency, EPA Method 5

Guideline :
Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management *Thanitak.*

Approved by

Thanita Kulsuriwong
Scientist (4)
หน้างาน 7-323-4-0029

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Approved by

Dej Changchon
Senior Manager
หน้างาน 7-323-4-0001

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492804
Date Received : Aug 21, 2024
Date Reported : Aug 29, 2024
Report Number: 3080828-1

Page 2 of 2

Sample Number	2492804-1	
Sampled Date	Aug 21, 2024	
Sample Description	Emission from Stationary Source	
Location	HRSG #6 (GPS 47P 0730759, 1405004)	
Date Analysis Commenced	Aug 22, 2024	
Condition of Sample	Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated	

Stack Description									
Ambient Pressure	754	mmHg	Diameter	3.30	m	Oxygen	14.3	%	
Ambient Temperature	31.6	°C	Shape	Circle		Carbon Dioxide	4.3	%	
Type of Process	Combustion		Stack Temperature	176	°C	Gas Velocity	23.4	m/s	
Type of Fuel	Natural Gas		Moisture	8.68	%	Flow Rate (Actual O2)	432844	Nm3/hr	
Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location

Air Testing									
Total Suspended Particulate	10:30 AM - 11:12 AM	g/s	-	-	<0.060	-	0.40	Calculated	Rayong

Guideline :
Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)
Sampling By : Sathaporn Thakarn หน้างาน 7-323-4-0036 , Sittippan Sanachiw หน้างาน 7-323-4-0009

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * figure not included in scope of Accreditation ISO/IEC 17025.

Thanitak.

Technical Management

Thanita Kulsuriwong
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หน้างาน 7-323-4-0029

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Senior Manager
หน้างาน 7-323-4-0001

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492762
Date Received :Aug 22, 2024
Date Reported :Sep 03, 2024
Report Number :3080789-1

Page 1 of 1

Sample Number	2492762-1									
Sample Description	Emission from Stationary Source									
Location	Auxiliary Boiler (GPS 47P 0730869, 1405098)									
Measurement Date	Aug 22, 2024									

Run No.	Sampling Time	Stack Description			Oxides of Nitrogen (ppm)		
		31.3 °C	755 mmHg	1.80 m	at Actual O ₂	at 7% O ₂	
1	10:00 AM - 10:20 AM				32.39	39.32	
2	10:21 AM - 10:41 AM				32.67	39.61	
3	10:42 AM - 11:02 AM				32.58	39.62	
Average (ppm)					32.55	39.52	
Guideline ^{1/} (ppm)					-	53	
Guideline ^{2/} (ppm)					-	120	
Guideline ^{3/} (ppm)					-	120	
Result (mg/Nm ³)					61.23	74.35	
Emission rate at Actual O ₂ (g/s)						0.6969	
Guideline ^{3/} (g/s)						2.10	
Method						US EPA Method 7E	

Sampled By :
Guideline :

Boonyaritt Iantit
^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 1)
^{2/} Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
^{3/} Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Wichan Choocharat
Wichan Choocharat
Manager

Approved by

Sarayuht Jitrantont
Sarayuht Jitrantont
Assistant General Manager

โทรศัพท์ 0-204-4-0006

โทรศัพท์ 0-204-4-0003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492762
Date Received :Aug 22, 2024
Date Reported :Sep 03, 2024
Report Number :3080789-1

Page 1 of 1

Sample Number	2492762-1									
Sample Description	Emission from Stationary Source									
Location	Auxiliary Boiler (GPS 47P 0730869, 1405098)									
Measurement Date	Aug 22, 2024									

Run No.	Sampling Time	Stack Description			Carbon Dioxide		Carbon Monoxide (ppm)	
		31.3 °C	755 mmHg	1.80 m	Oxygen (%)	(%)	at Actual O ₂	at 7% O ₂
1	10:00 AM - 10:20 AM				9.45	6.74	0.53	0.64
2	10:21 AM - 10:41 AM				9.44	6.77	0.49	0.60
3	10:42 AM - 11:02 AM				9.47	6.75	0.48	0.58
Average (ppm)					9.45	6.75	0.50	0.61
Result (mg/Nm ³)							0.57	0.70
Emission Rate at Actual O ₂ (g/s)								0.0065
Method								US EPA Method 10

Sampled By : Boonyaritt Iantit

Technical Management

Wichan Choocharat
Wichan Choocharat
Manager

Approved by

Sarayuht Jitrantont
Sarayuht Jitrantont
Assistant General Manager

โทรศัพท์ 0-204-4-0006

โทรศัพท์ 0-204-4-0003

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042

Lot ID: 2492766
Date Received : Aug 22, 2024
Date Reported : Aug 29, 2024
Report Number: 3080800-1

Page 1 of 2

Sample Number	2492766-1			
Sampled Date	Aug 22, 2024			
Sample Description	Emission from Stationary Source			
Location	Auxiliary Boiler (GPS 47P 0730869, 1405098)			
Date Analysis Commenced	Aug 23, 2024			
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle			

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂ at 9.4 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location	
Stack Description										
Ambient Pressure	755	mmHg	Diameter	1.80	m	Oxygen			9.4	%
Ambient Temperature	31.3	°C	Shape	Circle		Carbon Dioxide			6.8	%
Type of Process	Combustion		Stack Temperature	156	°C	Gas Velocity			7.2	m/s
Type of Fuel	Natural Gas		Moisture	9.76	%	Flow Rate (Actual O2)			41000	Nm3/hr

Air Testing									
Total Suspended Particulate	10:00 AM - 10:48 AM	mg/m ³	-	0.5	<0.5	<0.5	60	1.20	United States Environmental Protection Agency, EPA Method 5

Guideline :
Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
หมายเลข 7-323-4-0029

Approved by

Dhman.

Dej Changchon
Senior Manager
หมายเลข 7-323-4-0001

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S:\Reports_Air Stack_O2_26L.rpt (10:38AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042

Lot ID: 2492766
Date Received : Aug 22, 2024
Date Reported : Aug 29, 2024
Report Number: 3080800-1

Page 2 of 2

Sample Number	2492766-1			
Sampled Date	Aug 22, 2024			
Sample Description	Emission from Stationary Source			
Location	Auxiliary Boiler (GPS 47F 0730869, 1405098)			
Date Analysis Commenced	Aug 23, 2024			
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle			

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Stack Description									
Ambient Pressure	755	mmHg	Diameter	1.80	m	Oxygen	9.4	%	
Ambient Temperature	31.3	°C	Shape	Circle		Carbon Dioxide	6.8	%	
Type of Process	Combustion		Stack Temperature	156	°C	Gas Velocity	7.2	m/s	
Type of Fuel	Natural Gas		Moisture	9.76	%	Flow Rate (Actual O ₂)	41000	Nm3/hr	

Air Testing									
Total Suspended Particulate	10:00 AM - 10:48 AM	g/s	-	-	<0.006	-	0.019	Calculated	Rayong

Guideline :
Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.
Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 1)
Sampling By : Tinnakorn Kulchart หมายเลข 7-323-4-0062 , Sawai Tonpho หมายเลข 7-323-4-0046

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
หมายเลข 7-323-4-0029

Approved by

Dhman.

Dej Changchon
Senior Manager
หมายเลข 7-323-4-0001

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คุณภาพอากาศในบริเวณการทำงาน



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 1 of 10

Sample Number	2493162-1
Sampled Date	Sep 17, 2024
Sample Description	Air Quality
Location	พื้นที่ HRSG #3
Date Analysis Commenced	Sep 17, 2024
Condition of Sample	Drawn into one amber plastic bottle, refrigerated
Barometric Pressure	752 mmHg
Atmospheric Temperature	32.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Ammonia	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	50	Based on Method of Air Sampling and Analysis, 401	Rayong

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 2 of 10

Sample Number	2493162-2
Sampled Date	Sep 17, 2024
Sample Description	Air Quality
Location	พื้นที่ HRSG #4
Date Analysis Commenced	Sep 17, 2024
Condition of Sample	Drawn into one amber plastic bottle, refrigerated
Barometric Pressure	752 mmHg
Atmospheric Temperature	32.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Ammonia	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	50	Based on Method of Air Sampling and Analysis, 401	Rayong

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 3 of 10

Sample Number	2493162-3						
Sampled Date	Sep 17, 2024						
Sample Description	Air Quality						
Location	พื้นที่ HRSG #5						
Date Analysis Commenced	Sep 17, 2024						
Condition of Sample	Drawn into one amber plastic bottle, refrigerated						
Barometric Pressure	752 mmHg						
Atmospheric Temperature	32.5 °C						
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method
Air Testing							
Ammonia	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	50	Based on Method of Air Sampling and Analysis, 401
Rayong							

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 4 of 10

Sample Number	2493162-4						
Sampled Date	Sep 17, 2024						
Sample Description	Air Quality						
Location	พื้นที่ HRSG #6						
Date Analysis Commenced	Sep 17, 2024						
Condition of Sample	Drawn into one amber plastic bottle, refrigerated						
Barometric Pressure	752 mmHg						
Atmospheric Temperature	32.5 °C						
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method
Air Testing							
Ammonia	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	50	Based on Method of Air Sampling and Analysis, 401
Rayong							

Guideline :
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Sampled By : Saknarin Jaraskay

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Thanita Kulsriwong

Scientist (4)

Thanita Kulsriwong
Scientist (4)



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P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 5 of 10

Sample Number	2403162-5							
Sampled Date	Sep 17, 2024							
Sample Description	Air Quality							
Location	NH4OH Tank							
Date Analysis Commenced	Sep 17, 2024							
Condition of Sample	Drawn into one amber plastic bottle, refrigerated							
Barometric Pressure	752 mmHg							
Atmospheric Temperature	32.5 °C							
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline Testing Location
Air Testing								
Ammonia	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	50	Based on Method of Air Sampling and Analysis, 401	Rayong

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
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P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 6 of 10

Sample Number	2493162-6							
Sampled Date	Sep 17, 2024							
Sample Description	Air Quality							
Location	Cooling Tower#1							
Date Analysis Commenced	Sep 20, 2024							
Condition of Sample	Drawn into one amber plastic bottle, refrigerated							
Barometric Pressure	752 mmHg							
Atmospheric Temperature	32.5 °C							
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline Testing Location
Air Testing								
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101	MOL
								Bangkok

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

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P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 7 of 10

Sample Number	2493162-7						
Sampled Date	Sep 17, 2024						
Sample Description	Air Quality						
Location	Cooling Tower#2						
Date Analysis Commenced	Sep 20, 2024						
Condition of Sample	Drawn into one amber plastic bottle, refrigerated						
Barometric Pressure	752 mmHg						
Atmospheric Temperature	32.5 °C						
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method
Air Testing							
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101
							MOL
							Bangkok

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
- LOD : Limit of Detection
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Thanita.

Approved by

Thanita Kulsurwong
Scientist (4)

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P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 8 of 10

Sample Number	2493162-8						
Sampled Date	Sep 17, 2024						
Sample Description	Air Quality						
Location	Cooling Tower#3						
Date Analysis Commenced	Sep 20, 2024						
Condition of Sample	Drawn into one amber plastic bottle, refrigerated						
Barometric Pressure	752 mmHg						
Atmospheric Temperature	32.5 °C						
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method
Air Testing							
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101
							MOL
							Bangkok

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
- LOD : Limit of Detection
- "≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Thanita.

Approved by

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Scientist (4)

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 9 of 10

Sample Number 2493162-9
Sampled Date Sep 17, 2024
Sample Description Air Quality
Location Demin Plant#1
Date Analysis Commenced Sep 18, 2024
Condition of Sample Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure 752 mmHg
Atmospheric Temperature 32.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Hydrogen chloride	10:00 AM - 12:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	Bangkok
Sodium hydroxide as NaOH	10:00 AM - 12:00 PM	mg/m3	-	0.05	<0.05	2	NIOSH (1994), 7401	Rayong

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493162
Date Received : Sep 17, 2024
Date Reported : Sep 27, 2024
Report Number : 3081784-1

Page 10 of 10

Sample Number 2493162-10
Sampled Date Sep 17, 2024
Sample Description Air Quality
Location Demin Plant#2
Date Analysis Commenced Sep 18, 2024
Condition of Sample Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure 752 mmHg
Atmospheric Temperature 32.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Hydrogen chloride	10:00 AM - 12:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	Bangkok
Sodium hydroxide as NaOH	10:00 AM - 12:00 PM	mg/m3	-	0.05	<0.05	2	NIOSH (1994), 7401	Rayong

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Saknarin Jaraskay

Remark :
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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095482-1

Page 1 of 1

Sample Number 2492806-1
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 16 - Aug 17, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	67.6	88.1	64.0
02:00 PM - 03:00 PM	67.4	83.3	63.9
03:00 PM - 04:00 PM	67.3	87.4	63.9
04:00 PM - 05:00 PM	67.4	87.4	63.7
05:00 PM - 06:00 PM	68.0	88.4	64.0
06:00 PM - 07:00 PM	68.1	90.0	64.0
07:00 PM - 08:00 PM	67.7	87.7	63.9
08:00 PM - 09:00 PM	67.8	86.4	64.1
09:00 PM - 10:00 PM	67.5	82.7	64.0
10:00 PM - 11:00 PM	68.1	92.5	63.9
11:00 PM - 12:00 AM	67.8	86.1	64.5
12:00 AM - 01:00 AM	66.6	84.6	64.7
01:00 AM - 02:00 AM	66.3	84.4	64.5
02:00 AM - 03:00 AM	66.0	85.5	64.4
03:00 AM - 04:00 AM	65.7	83.2	64.4
04:00 AM - 05:00 AM	65.5	80.7	64.4
05:00 AM - 06:00 AM	66.1	84.2	64.7
06:00 AM - 07:00 AM	66.2	90.0	64.7
07:00 AM - 08:00 AM	66.0	83.4	64.8
08:00 AM - 09:00 AM	66.0	79.9	64.5
09:00 AM - 10:00 AM	66.4	82.2	64.5
10:00 AM - 11:00 AM	69.0	94.2	64.9
11:00 AM - 12:00 PM	69.8	87.8	64.5
12:00 PM - 01:00 PM	67.9	82.2	64.8

Leq Average 24 hrs. (dB(A)) 67.3
Lmax (dB(A)) 94.2
L90 (dB(A)) 64.4
Ldn (dB(A)) 73.2

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024

Date Reported : Aug 28, 2024

Report Number: 3095483-1

Page 1 of 1

Sample Number 2492806-2
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 17 - Aug 18, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	68.5	87.3	64.9
02:00 PM - 03:00 PM	67.4	84.8	64.7
03:00 PM - 04:00 PM	67.2	82.6	64.7
04:00 PM - 05:00 PM	67.0	86.2	64.5
05:00 PM - 06:00 PM	66.8	85.3	64.5
06:00 PM - 07:00 PM	67.6	91.9	64.6
07:00 PM - 08:00 PM	68.3	89.4	64.7
08:00 PM - 09:00 PM	68.5	80.9	65.3
09:00 PM - 10:00 PM	68.7	94.9	65.1
10:00 PM - 11:00 PM	67.7	84.2	64.9
11:00 PM - 12:00 AM	67.0	85.0	64.7
12:00 AM - 01:00 AM	66.2	82.0	64.7
01:00 AM - 02:00 AM	65.9	88.5	64.6
02:00 AM - 03:00 AM	65.9	84.7	64.6
03:00 AM - 04:00 AM	65.7	80.2	64.6
04:00 AM - 05:00 AM	65.8	88.2	64.5
05:00 AM - 06:00 AM	66.0	84.1	64.6
06:00 AM - 07:00 AM	65.5	83.0	64.6
07:00 AM - 08:00 AM	65.4	81.1	64.5
08:00 AM - 09:00 AM	65.5	80.6	64.6
09:00 AM - 10:00 AM	65.9	83.6	64.4
10:00 AM - 11:00 AM	67.6	86.7	64.5
11:00 AM - 12:00 PM	69.0	89.4	64.7
12:00 PM - 01:00 PM	67.9	85.6	64.1

Leq Average 24 hrs. (dB(A)) 67.1
Lmax (dB(A)) 94.9
L90 (dB(A)) 64.6
Ldn (dB(A)) 72.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095484-1

Page 1 of 1

Sample Number 2492806-3
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 18 - Aug 19, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	66.9	84.1	63.7
02:00 PM - 03:00 PM	68.0	93.3	63.7
03:00 PM - 04:00 PM	66.7	82.0	64.4
04:00 PM - 05:00 PM	67.0	84.9	64.0
05:00 PM - 06:00 PM	66.9	84.9	63.6
06:00 PM - 07:00 PM	67.2	84.6	63.8
07:00 PM - 08:00 PM	67.5	90.7	63.5
08:00 PM - 09:00 PM	67.5	85.0	64.6
09:00 PM - 10:00 PM	67.3	85.6	64.6
10:00 PM - 11:00 PM	69.9	99.4	64.7
11:00 PM - 12:00 AM	68.0	89.6	64.9
12:00 AM - 01:00 AM	66.8	84.7	65.0
01:00 AM - 02:00 AM	67.0	85.3	65.0
02:00 AM - 03:00 AM	68.2	86.0	65.3
03:00 AM - 04:00 AM	66.6	84.1	64.9
04:00 AM - 05:00 AM	66.6	84.6	64.9
05:00 AM - 06:00 AM	66.5	84.4	64.9
06:00 AM - 07:00 AM	67.5	83.0	65.1
07:00 AM - 08:00 AM	67.1	84.9	65.1
08:00 AM - 09:00 AM	67.6	85.2	65.1
09:00 AM - 10:00 AM	67.8	85.3	65.1
10:00 AM - 11:00 AM	69.4	84.8	65.4
11:00 AM - 12:00 PM	69.8	87.9	64.3
12:00 PM - 01:00 PM	69.7	88.5	64.9

Leq Average 24 hrs. (dB(A)) 67.8
Lmax (dB(A)) 99.4
L90 (dB(A)) 64.9
Ldn (dB(A)) 74.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Scientist (3)

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Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095485-1

Page 1 of 1

Sample Number 2492806-4
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 19 - Aug 20, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	68.4	86.1	63.7
02:00 PM - 03:00 PM	68.5	85.7	64.5
03:00 PM - 04:00 PM	68.0	88.2	64.1
04:00 PM - 05:00 PM	68.7	85.7	64.7
05:00 PM - 06:00 PM	67.7	84.1	63.6
06:00 PM - 07:00 PM	69.3	84.4	63.9
07:00 PM - 08:00 PM	68.5	89.6	64.6
08:00 PM - 09:00 PM	68.5	94.0	65.0
09:00 PM - 10:00 PM	68.7	87.8	65.0
10:00 PM - 11:00 PM	69.3	91.8	65.0
11:00 PM - 12:00 AM	68.5	90.6	64.9
12:00 AM - 01:00 AM	66.7	84.5	64.6
01:00 AM - 02:00 AM	67.4	87.6	64.6
02:00 AM - 03:00 AM	66.9	88.6	64.6
03:00 AM - 04:00 AM	66.7	85.9	64.5
04:00 AM - 05:00 AM	66.2	84.6	64.6
05:00 AM - 06:00 AM	66.2	82.8	64.7
06:00 AM - 07:00 AM	66.1	83.8	64.6
07:00 AM - 08:00 AM	66.8	82.8	65.1
08:00 AM - 09:00 AM	66.6	84.3	64.8
09:00 AM - 10:00 AM	66.5	85.0	64.8
10:00 AM - 11:00 AM	69.5	85.1	65.1
11:00 AM - 12:00 PM	69.6	89.5	62.9
12:00 PM - 01:00 PM	69.4	88.9	64.3

Leq Average 24 hrs. (dB(A)) 68.0
Lmax (dB(A)) 94.0
L90 (dB(A)) 64.6
Ldn (dB(A)) 73.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095486-1

Page 1 of 1

Sample Number 2492806-5
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 20 - Aug 21, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	69.6	87.7	64.1
02:00 PM - 03:00 PM	68.5	87.3	63.7
03:00 PM - 04:00 PM	67.2	84.9	62.5
04:00 PM - 05:00 PM	67.3	84.5	63.3
05:00 PM - 06:00 PM	66.8	87.0	62.9
06:00 PM - 07:00 PM	67.5	84.5	63.5
07:00 PM - 08:00 PM	66.5	82.9	62.4
08:00 PM - 09:00 PM	68.1	83.2	62.7
09:00 PM - 10:00 PM	67.3	88.4	63.4
10:00 PM - 11:00 PM	67.3	92.8	63.8
11:00 PM - 12:00 AM	67.5	86.6	63.8
12:00 AM - 01:00 AM	68.1	90.6	63.8
01:00 AM - 02:00 AM	67.3	89.4	63.7
02:00 AM - 03:00 AM	65.5	83.3	63.4
03:00 AM - 04:00 AM	66.2	86.4	63.4
04:00 AM - 05:00 AM	65.7	87.4	63.4
05:00 AM - 06:00 AM	65.5	84.7	63.3
06:00 AM - 07:00 AM	65.0	83.4	63.4
07:00 AM - 08:00 AM	65.0	81.6	63.5
08:00 AM - 09:00 AM	64.9	82.6	63.4
09:00 AM - 10:00 AM	65.6	81.6	63.9
10:00 AM - 11:00 AM	65.4	83.1	63.6
11:00 AM - 12:00 PM	65.3	83.8	63.6
12:00 PM - 01:00 PM	68.3	83.9	63.9

Leq Average 24 hrs. (dB(A)) 66.9
Lmax (dB(A)) 92.8
L90 (dB(A)) 63.4
Ldn (dB(A)) 73.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095487-1

Page 1 of 1

Sample Number 2492806-6
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 21 - Aug 22, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	69.7	89.6	63.0
02:00 PM - 03:00 PM	68.2	87.7	63.1
03:00 PM - 04:00 PM	65.0	80.8	63.5
04:00 PM - 05:00 PM	64.7	87.3	63.4
05:00 PM - 06:00 PM	64.7	83.5	63.4
06:00 PM - 07:00 PM	64.5	79.0	63.4
07:00 PM - 08:00 PM	64.6	87.0	63.3
08:00 PM - 09:00 PM	64.8	82.9	63.4
09:00 PM - 10:00 PM	64.3	81.8	63.4
10:00 PM - 11:00 PM	64.2	79.9	63.3
11:00 PM - 12:00 AM	64.3	79.4	63.4
12:00 AM - 01:00 AM	64.7	82.4	63.2
01:00 AM - 02:00 AM	66.4	85.5	63.3
02:00 AM - 03:00 AM	67.8	88.2	63.5
03:00 AM - 04:00 AM	66.7	84.4	62.9
04:00 AM - 05:00 AM	65.7	82.9	62.5
05:00 AM - 06:00 AM	66.8	92.1	62.5
06:00 AM - 07:00 AM	65.5	80.8	63.2
07:00 AM - 08:00 AM	65.8	83.7	62.8
08:00 AM - 09:00 AM	65.7	83.7	62.4
09:00 AM - 10:00 AM	66.0	83.4	62.6
10:00 AM - 11:00 AM	66.3	89.5	62.3
11:00 AM - 12:00 PM	66.3	83.8	63.4
12:00 PM - 01:00 PM	66.1	84.4	63.4

Leq Average 24 hrs. (dB(A)) 66.0
Lmax (dB(A)) 92.1
L90 (dB(A)) 63.3
Ldn (dB(A)) 72.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2492806

Date Received : Aug 23, 2024
Date Reported : Aug 28, 2024
Report Number: 3095488-1

Page 1 of 1

Sample Number 2492806-7
Parameter Noise Leq 24 hrs.
Location ริมรั้วด้านทางเข้าโรงงาน (GPS 47P 0730817, 1405162)
Measurement Date Aug 22 - Aug 23, 2024
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	68.7	98.2	63.5
02:00 PM - 03:00 PM	66.8	88.4	63.7
03:00 PM - 04:00 PM	65.6	83.5	63.8
04:00 PM - 05:00 PM	65.8	84.1	63.8
05:00 PM - 06:00 PM	67.0	84.8	64.1
06:00 PM - 07:00 PM	65.4	82.9	63.7
07:00 PM - 08:00 PM	65.4	83.4	63.7
08:00 PM - 09:00 PM	65.3	83.2	63.7
09:00 PM - 10:00 PM	66.3	81.8	63.9
10:00 PM - 11:00 PM	65.9	83.7	63.9
11:00 PM - 12:00 AM	66.4	84.0	63.9
12:00 AM - 01:00 AM	66.6	84.1	63.9
01:00 AM - 02:00 AM	68.2	83.6	64.2
02:00 AM - 03:00 AM	66.4	86.9	62.8
03:00 AM - 04:00 AM	66.2	82.1	62.7
04:00 AM - 05:00 AM	66.1	86.2	62.7
05:00 AM - 06:00 AM	66.2	86.2	62.5
06:00 AM - 07:00 AM	66.8	87.2	62.8
07:00 AM - 08:00 AM	66.9	88.8	62.8
08:00 AM - 09:00 AM	66.5	86.5	62.7
09:00 AM - 10:00 AM	66.6	85.2	62.9
10:00 AM - 11:00 AM	66.3	81.5	62.8
11:00 AM - 12:00 PM	66.9	91.3	62.7
12:00 PM - 01:00 PM	66.6	84.9	63.3

Leq Average 24 hrs. (dB(A)) 66.5
Lmax (dB(A)) 98.2
L90 (dB(A)) 63.5
Ldn (dB(A)) 73.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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Life Sciences

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ระดับเสียงในบริเวณการทำงาน



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong, Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117091-1

Page 1 of 1

Sample Number	2493685-1			
Parameter	Noise (Leq 8 hrs.)			
Location	เครื่องวัดอากาศ			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskay			
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
	10:27 AM - 11:27 AM	80.4	100.4	78.5
	11:27 AM - 12:27 PM	79.0	82.7	78.3
	12:27 PM - 01:27 PM	78.8	84.6	77.9
	01:27 PM - 02:27 PM	78.6	83.6	77.9
	02:27 PM - 03:27 PM	78.6	83.6	77.9
	03:27 PM - 04:27 PM	79.5	85.5	78.1
	04:27 PM - 05:27 PM	79.4	86.2	78.3
	05:27 PM - 06:27 PM	79.2	83.7	78.2

Technical Management
Chonticha Subongkroh
Scientist (3)

Approved by
Supot Salameh
Section Head

Supt S.

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong, Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117092-1

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Sample Number	2493685-2			
Parameter	Noise (Leq 8 hrs.)			
Location	ทางลัดขึ้น			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskay			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:27 PM - 11:27 PM	69.0	72.7	58.7	
11:27 PM - 12:27 AM	68.8	73.0	58.6	
12:27 AM - 01:27 AM	68.8	76.0	58.6	
01:27 AM - 02:27 AM	68.8	77.3	58.6	
02:27 AM - 03:27 AM	68.7	74.3	58.5	
03:27 AM - 04:27 AM	68.8	74.2	58.5	
04:27 AM - 05:27 AM	68.8	75.1	58.6	
05:27 AM - 06:27 AM	68.9	78.6	58.6	

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong, Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117093-1

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Sample Number	2493685-3
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #1
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
10:24 PM - 11:24 PM	75.6 77.0 75.4
11:24 PM - 12:24 AM	75.7 76.8 75.5
12:24 AM - 01:24 AM	75.7 76.6 75.6
01:24 AM - 02:24 AM	75.6 76.7 75.5
02:24 AM - 03:24 AM	75.7 76.6 75.6
03:24 AM - 04:24 AM	75.7 77.0 75.6
04:24 AM - 05:24 AM	75.7 76.6 75.6
05:24 AM - 06:24 AM	75.8 78.2 75.6
Leq Average 8 hrs. (dB(A))	75.7
Lmax (dB(A))	78.2
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117094-1

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Sample Number	2493685-4
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #2
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:17 PM - 10:17 PM	80.2 81.1 80.1
10:17 PM - 11:17 PM	80.2 80.7 80.0
11:17 PM - 12:17 AM	80.2 81.1 80.1
12:17 AM - 01:17 AM	80.2 81.3 80.0
01:17 AM - 02:17 AM	80.2 82.1 80.0
02:17 AM - 03:17 AM	80.2 81.2 80.0
03:17 AM - 04:17 AM	80.2 80.8 80.0
04:17 AM - 05:17 AM	80.2 81.5 80.0
Leq Average 8 hrs. (dB(A))	80.2
Lmax (dB(A))	82.1
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117095-1

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Sample Number	2493685-5			
Parameter	Noise (Leq 8 hrs.)			
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #3			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskay			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:11 PM - 11:11 PM	82.5	83.1	82.3	
11:11 PM - 12:11 AM	82.4	83.1	82.2	
12:11 AM - 01:11 AM	82.4	83.4	82.2	
01:11 AM - 02:11 AM	82.4	82.9	82.2	
02:11 AM - 03:11 AM	82.4	83.6	82.2	
03:11 AM - 04:11 AM	82.4	83.9	82.2	
04:11 AM - 05:11 AM	82.4	82.9	82.3	
05:11 AM - 06:11 AM	82.4	83.1	82.3	

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6403-32/ EMAIL

S:\Reports_Air Noise.rpt (2:40PM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117096-1

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Sample Number	2493685-6			
Parameter	Noise (Leq 8 hrs.)			
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #4			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskay			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:06 PM - 10:06 PM	79.5	80.4	79.4	
10:06 PM - 11:06 PM	79.5	80.8	79.4	
11:06 PM - 12:06 AM	79.6	80.4	79.4	
12:06 AM - 01:06 AM	79.5	80.3	79.4	
01:06 AM - 02:06 AM	79.6	80.4	79.4	
02:06 AM - 03:06 AM	79.5	80.9	79.4	
03:06 AM - 04:06 AM	79.5	80.3	79.3	
04:06 AM - 05:06 AM	79.5	80.2	79.3	

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S:\Reports_Air Noise.rpt (2:40PM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117097-1

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Sample Number	2493685-7
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #5
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:21 PM - 10:21 PM	81.8 82.3 81.6
10:21 PM - 11:21 PM	81.7 82.1 81.6
11:21 PM - 12:21 AM	81.6 82.2 81.5
12:21 AM - 01:21 AM	81.6 82.3 81.5
01:21 AM - 02:21 AM	81.6 82.1 81.4
02:21 AM - 03:21 AM	81.6 82.1 81.5
03:21 AM - 04:21 AM	81.5 82.2 81.4
04:21 AM - 05:21 AM	81.6 82.1 81.5
Leq Average 8 hrs. (dB(A))	81.6
Lmax (dB(A))	82.3
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117098-1

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Sample Number	2493685-8
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #6
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:32 PM - 10:32 PM	80.0 80.9 79.8
10:32 PM - 11:32 PM	80.0 80.9 79.8
11:32 PM - 12:32 AM	79.9 80.9 79.7
12:32 AM - 01:32 AM	80.0 81.0 79.7
01:32 AM - 02:32 AM	80.0 81.2 79.7
02:32 AM - 03:32 AM	80.0 81.0 79.8
03:32 AM - 04:32 AM	80.0 82.4 79.7
04:32 AM - 05:32 AM	80.2 89.6 79.8
Leq Average 8 hrs. (dB(A))	80.3
Lmax (dB(A))	89.6
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117099-1

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Sample Number	2493685-9
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #1
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
10:24 AM - 11:24 AM	77.7
11:24 AM - 12:24 PM	77.7
12:24 PM - 01:24 PM	77.7
01:24 PM - 02:24 PM	77.6
02:24 PM - 03:24 PM	77.5
03:24 PM - 04:24 PM	77.7
04:24 PM - 05:24 PM	77.7
05:24 PM - 06:24 PM	77.7
Leq Average 8 hrs. (dB(A))	77.7
Lmax (dB(A))	97.0
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเข้า/กับสาธารณะต่อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117100-1

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Sample Number	2493685-10
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #2
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
09:17 AM - 10:17 AM	85.4
10:17 AM - 11:17 AM	80.7
11:17 AM - 12:17 PM	80.9
12:17 PM - 01:17 PM	80.5
01:17 PM - 02:17 PM	80.7
02:17 PM - 03:17 PM	80.7
03:17 PM - 04:17 PM	80.4
04:17 PM - 05:17 PM	80.8
Leq Average 8 hrs. (dB(A))	79.7
Lmax (dB(A))	85.4
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเข้า/กับสาธารณะต่อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117101-1

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Sample Number	2493685-11
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #3
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
10:11 AM - 11:11 AM	80.1 92.9 79.7
11:11 AM - 12:11 PM	80.0 81.0 79.7
12:11 PM - 01:11 PM	80.3 81.1 80.1
01:11 PM - 02:11 PM	80.2 81.0 80.0
02:11 PM - 03:11 PM	80.1 81.0 79.9
03:11 PM - 04:11 PM	80.1 81.1 80.0
04:11 PM - 05:11 PM	80.2 81.0 80.0
05:11 PM - 06:11 PM	80.3 81.2 80.1
Leq Average 8 hrs. (dB(A))	80.2
Lmax (dB(A))	92.9
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117102-1

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Sample Number	2493685-12
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #4
Measurement Date	Sep 16, 2024
Measurement by	Saknarin Jaraskay
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:06 AM - 10:06 AM	79.7 92.0 79.0
10:06 AM - 11:06 AM	79.5 81.4 79.0
11:06 AM - 12:06 PM	79.5 81.3 79.1
12:06 PM - 01:06 PM	79.5 81.0 79.0
01:06 PM - 02:06 PM	79.3 81.0 78.9
02:06 PM - 03:06 PM	79.2 80.8 78.8
03:06 PM - 04:06 PM	79.1 80.8 78.8
04:06 PM - 05:06 PM	79.2 81.6 78.9
Leq Average 8 hrs. (dB(A))	79.4
Lmax (dB(A))	92.0
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117103-1

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Sample Number	2493685-13			
Parameter	Noise (Leq 8 hrs.)			
Location	พื่นเขตอุตสาหกรรม HRSG #5			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskay			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:21 AM - 10:21 AM	74.8	83.9	74.4	
10:21 AM - 11:21 AM	74.7	75.7	74.4	
11:21 AM - 12:21 PM	74.7	75.7	74.5	
12:21 PM - 01:21 PM	74.7	76.0	74.5	
01:21 PM - 02:21 PM	74.6	75.5	74.3	
02:21 PM - 03:21 PM	74.4	75.3	74.2	
03:21 PM - 04:21 PM	74.5	75.5	74.3	
04:21 PM - 05:21 PM	74.5	75.4	74.4	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117104-1

Page 1 of 1

Sample Number	2493685-14		
Parameter	Noise (Leq 8 hrs.)		
Location	พื่นเขตอุตสาหกรรม HRSG #6		
Measurement Date	Sep 16, 2024		
Measurement by	Saknarin Jaraskay		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:32 AM - 10:32 AM	77.0	84.5	76.8
10:32 AM - 11:32 AM	77.0	78.7	76.9
11:32 AM - 12:32 PM	77.0	78.6	76.9
12:32 PM - 01:32 PM	77.0	77.8	76.8
01:32 PM - 02:32 PM	76.8	77.8	76.5
02:32 PM - 03:32 PM	76.7	77.6	76.4
03:32 PM - 04:32 PM	76.8	77.9	76.6
04:32 PM - 05:32 PM	76.9	78.5	76.7

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493685
Date Received : Sep 17, 2024
Date Reported : Sep 20, 2024
Report Number: 3117105-1

Page 1 of 1

Sample Number	2493685-15			
Parameter	Noise (Leq 8 hrs.)			
Location	บริเวณใต้โถงทาง			
Measurement Date	Sep 16, 2024			
Measurement by	Saknarin Jaraskey			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:53 AM - 10:53 AM	76.7	81.1	76.0	
10:53 AM - 11:53 AM	76.7	80.7	76.0	
11:53 AM - 12:53 PM	76.6	78.7	76.2	
12:53 PM - 01:53 PM	76.6	78.8	75.9	
01:53 PM - 02:53 PM	76.0	77.6	75.6	
02:53 PM - 03:53 PM	75.9	77.4	75.6	
03:53 PM - 04:53 PM	75.9	77.3	75.5	
04:53 PM - 05:53 PM	76.2	78.1	75.9	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177611-1

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Sample Number	24114689-1		
Parameter	Noise (Leq 8 hrs.)		
Location	เครื่องตัดหญ้า		
Measurement Date	Nov 20, 2024		
Measurement by	Romachai Moungma		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:26 AM - 09:26 AM	81.2	104.1	77.1
09:26 AM - 10:26 AM	79.5	85.7	76.9
10:26 AM - 11:26 AM	79.3	85.2	76.8
11:26 AM - 12:26 PM	79.2	88.9	76.9
12:26 PM - 01:26 PM	78.4	84.4	76.4
01:26 PM - 02:26 PM	78.2	84.9	76.2
02:26 PM - 03:26 PM	78.2	84.5	76.5
03:26 PM - 04:26 PM	78.5	84.3	77.2

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong, Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177612-1

Page 1 of 1

Sample Number	24114689-2			
Parameter	Noise (Leq 8 hrs.)			
Location	ทางเดิน			
Measurement Date	Nov 20, 2024			
Measurement by	Romachai Moungma			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
08:29 AM - 09:29 AM	69.6	84.1	68.9	
09:29 AM - 10:29 AM	69.9	86.5	68.8	
10:29 AM - 11:29 AM	69.7	85.0	68.8	
11:29 AM - 12:29 PM	69.8	84.3	68.7	
12:29 PM - 01:29 PM	69.5	80.8	68.7	
01:29 PM - 02:29 PM	70.3	85.4	68.7	
02:29 PM - 03:29 PM	70.0	85.3	68.7	
03:29 PM - 04:29 PM	69.8	87.3	69.0	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong, Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24139782
Date Received : Dec 23, 2024
Date Reported : Dec 24, 2024
Report Number: 3201830-1

Page 1 of 1

Sample Number	24139782-1			
Parameter	Noise (Leq 8 Hrs.)			
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #1			
Measurement Date	Dec 20, 2024			
Measurement by	Sitipan Sanachiw			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:00 AM - 11:00 AM	78.0	81.2	77.5	
11:00 AM - 12:00 PM	78.1	80.8	77.4	
12:00 PM - 01:00 PM	78.1	82.9	77.3	
01:00 PM - 02:00 PM	78.1	81.3	77.3	
02:00 PM - 03:00 PM	78.0	84.4	77.2	
03:00 PM - 04:00 PM	78.0	82.5	77.3	
04:00 PM - 05:00 PM	78.2	84.9	77.4	
05:00 PM - 06:00 PM	78.0	86.9	77.3	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177614-1

Page 1 of 1

Sample Number	24114689-4			
Parameter	Noise (Leq 8 hrs.)			
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #2			
Measurement Date	Nov 19, 2024			
Measurement by	Romachai Mungma			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:26 AM - 10:26 AM	80.7	81.6	80.6	
10:26 AM - 11:26 AM	80.3	80.9	80.2	
11:26 AM - 12:26 PM	80.3	81.2	80.2	
12:26 PM - 01:26 PM	80.5	81.6	80.3	
01:26 PM - 02:26 PM	81.0	83.0	80.9	
02:26 PM - 03:26 PM	80.4	81.4	80.2	
03:26 PM - 04:26 PM	80.6	81.3	80.5	
04:26 PM - 05:26 PM	80.4	88.2	80.2	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177615-1

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Sample Number	24114689-5			
Parameter	Noise (Leq 8 hrs.)			
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #3			
Measurement Date	Nov 19, 2024			
Measurement by	Romachai Mungma			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:24 AM - 10:24 AM	82.9	83.5	82.7	
10:24 AM - 11:24 AM	82.9	83.6	82.7	
11:24 AM - 12:24 PM	83.1	84.1	82.9	
12:24 PM - 01:24 PM	82.4	82.9	82.2	
01:24 PM - 02:24 PM	83.0	85.3	82.8	
02:24 PM - 03:24 PM	83.3	89.1	83.0	
03:24 PM - 04:24 PM	82.8	84.3	82.6	
04:24 PM - 05:24 PM	83.3	84.3	83.1	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177616-1

Page 1 of 1

Sample Number	24114689-6
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #4
Measurement Date	Nov 19, 2024
Measurement by	Romachai Moungma
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:22 AM - 10:22 AM	79.9 80.8 79.8
10:22 AM - 11:22 AM	80.0 81.3 79.9
11:22 AM - 12:22 PM	80.3 81.1 80.1
12:22 PM - 01:22 PM	79.5 80.3 79.4
01:22 PM - 02:22 PM	80.1 82.1 79.9
02:22 PM - 03:22 PM	80.5 85.2 80.3
03:22 PM - 04:22 PM	79.9 81.3 79.8
04:22 PM - 05:22 PM	80.5 81.3 80.3
Leq Average 8 hrs. (dB(A))	80.1
Lmax (dB(A))	85.2
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177617-1

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Sample Number	24114689-7
Parameter	Noise (Leq 8 hrs.)
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #5
Measurement Date	Nov 19, 2024
Measurement by	Romachai Moungma
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:05 AM - 10:05 AM	82.2 82.7 82.0
10:05 AM - 11:05 AM	82.2 82.6 82.1
11:05 AM - 12:05 PM	82.3 82.9 82.2
12:05 PM - 01:05 PM	82.1 82.8 82.0
01:05 PM - 02:05 PM	82.2 82.7 82.1
02:05 PM - 03:05 PM	82.3 83.5 82.1
03:05 PM - 04:05 PM	82.0 82.5 81.9
04:05 PM - 05:05 PM	82.5 83.1 82.4
Leq Average 8 hrs. (dB(A))	82.2
Lmax (dB(A))	83.5
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177618-1

Page 1 of 1

Sample Number	24114689-8		
Parameter	Noise (Leq 8 hrs.)		
Location	เครื่องกำเนิดไฟฟ้ากังหันก๊าซ #6		
Measurement Date	Nov 20, 2024		
Measurement by	Ronnachai Mungma		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:35 AM - 09:35 AM	80.4	81.3	80.2
09:35 AM - 10:35 AM	80.5	81.4	80.3
10:35 AM - 11:35 AM	80.6	81.6	80.4
11:35 AM - 12:35 PM	80.5	81.5	80.2
12:35 PM - 01:35 PM	80.7	81.7	80.3
01:35 PM - 02:35 PM	81.0	85.3	80.7
02:35 PM - 03:35 PM	80.4	81.4	80.2
03:35 PM - 04:35 PM	80.8	81.8	80.6

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24139782
Date Received : Dec 23, 2024
Date Reported : Dec 24, 2024
Report Number: 3201831-1

Page 1 of 1

Sample Number	24139782-2		
Parameter	Noise (Leq 8 hrs.)		
Location	พื่นเคียวไถนาหลัก HRSG #1		
Measurement Date	Dec 20, 2024		
Measurement by	Sitipan Sanachiw		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	78.7	84.4	77.8
11:00 AM - 12:00 PM	79.1	82.9	77.9
12:00 PM - 01:00 PM	78.5	82.9	77.7
01:00 PM - 02:00 PM	78.6	82.6	77.8
02:00 PM - 03:00 PM	78.8	83.0	77.7
03:00 PM - 04:00 PM	78.7	82.2	77.6
04:00 PM - 05:00 PM	78.6	82.3	77.6
05:00 PM - 06:00 PM	78.4	81.9	77.6

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177620-1

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Sample Number	24114689-10
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #2
Measurement Date	Nov 19, 2024
Measurement by	Romachai Mungma
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:35 AM - 10:35 AM	81.3 86.6 80.9
10:35 AM - 11:35 AM	81.3 82.2 81.1
11:35 AM - 12:35 PM	81.5 82.6 81.3
12:35 PM - 01:35 PM	80.9 81.7 80.6
01:35 PM - 02:35 PM	80.9 82.0 80.7
02:35 PM - 03:35 PM	81.5 82.6 81.2
03:35 PM - 04:35 PM	81.4 82.2 81.2
04:35 PM - 05:35 PM	82.0 83.6 81.8
Leq Average 8 hrs. (dB(A))	81.4
Lmax (dB(A))	86.6
Standard (dB(A))	140
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177621-1

Page 1 of 1

Sample Number	24114689-11
Parameter	Noise (Leq 8 hrs.)
Location	พื่นเขตติดต่อพื้นที่ HRSG #3
Measurement Date	Nov 19, 2024
Measurement by	Romachai Mungma
Time	
	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:32 AM - 10:32 AM	81.3 94.1 90.9
10:32 AM - 11:32 AM	81.5 82.5 81.2
11:32 AM - 12:32 PM	82.0 82.8 81.8
12:32 PM - 01:32 PM	81.4 82.3 81.2
01:32 PM - 02:32 PM	81.4 82.3 81.2
02:32 PM - 03:32 PM	82.0 83.0 81.9
03:32 PM - 04:32 PM	82.0 82.8 81.8
04:32 PM - 05:32 PM	82.4 83.3 82.2
Leq Average 8 hrs. (dB(A))	81.3
Lmax (dB(A))	94.1
Standard (dB(A))	140
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177622-1

Page 1 of 1

Sample Number	24114689-12		
Parameter	Noise (Leq 8 hrs.)		
Location	พื่นเขตอุตสาหกรรม HRSG #4		
Measurement Date	Nov 19, 2024		
Measurement by	Romachai Mungma		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:10 AM - 10:10 AM	81.8	94.1	81.1
10:10 AM - 11:10 AM	80.4	82.3	79.9
11:10 AM - 12:10 PM	80.9	82.7	80.5
12:10 PM - 01:10 PM	80.6	82.1	80.1
01:10 PM - 02:10 PM	80.7	82.4	80.3
02:10 PM - 03:10 PM	81.8	83.5	81.4
03:10 PM - 04:10 PM	81.3	82.9	80.9
04:10 PM - 05:10 PM	82.0	83.5	81.5
Leq Average 8 hrs. (dB(A))	81.2		
Lmax (dB(A))	94.1		
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖			

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177623-1

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Sample Number	24114689-13		
Parameter	Noise (Leq 8 hrs.)		
Location	พื่นเขตอุตสาหกรรม HRSG #5		
Measurement Date	Nov 19, 2024		
Measurement by	Romachai Mungma		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	79.8	84.2	79.1
10:15 AM - 11:15 AM	80.2	84.2	79.5
11:15 AM - 12:15 PM	80.5	82.6	80.1
12:15 PM - 01:15 PM	80.4	82.6	79.7
01:15 PM - 02:15 PM	80.1	81.7	79.7
02:15 PM - 03:15 PM	80.4	81.9	80.1
03:15 PM - 04:15 PM	81.0	82.4	80.6
04:15 PM - 05:15 PM	81.5	85.3	81.1
Leq Average 8 hrs. (dB(A))	80.5		
Lmax (dB(A))	85.3		
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖			

Technical Management
Chontichak
Chonticha Subongkroh
Scientist (3)

Approved by
Supt S.
Supot Salameh
Section Head

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24114689
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3177624-1

Page 1 of 1

Sample Number	24114689-14		
Parameter	Noise (Leq 8 hrs.)		
Location	พื้นที่อุตสาหกรรม HRSG #6		
Measurement Date	Nov 20, 2024		
Measurement by	Romachai Mungma		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:35 AM - 09:35 AM	79.5	98.8	79.1
09:35 AM - 10:35 AM	79.1	81.0	78.9
10:35 AM - 11:35 AM	79.0	80.1	78.8
11:35 AM - 12:35 PM	78.8	79.8	78.6
12:35 PM - 01:35 PM	78.7	79.8	78.5
01:35 PM - 02:35 PM	78.5	79.5	78.3
02:35 PM - 03:35 PM	78.7	80.8	78.4
03:35 PM - 04:35 PM	78.8	82.8	78.6

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 24139782
Date Received : Dec 23, 2024
Date Reported : Dec 24, 2024
Report Number: 3201832-1

Page 1 of 1

Sample Number	24139782-3			
Parameter	Noise (Leq 8 hrs.)			
Location	พื่นเขตอุตสาหกรรม			
Measurement Date	Dec 20, 2024			
Measurement by	Sitpan Sanachiw			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:00 AM - 11:00 AM	76.7	79.7	76.2	
11:00 AM - 12:00 PM	76.6	78.6	76.2	
12:00 PM - 01:00 PM	76.8	79.1	76.1	
01:00 PM - 02:00 PM	76.7	79.2	76.0	
02:00 PM - 03:00 PM	76.7	79.8	76.0	
03:00 PM - 04:00 PM	76.8	80.2	76.0	
04:00 PM - 05:00 PM	76.8	80.6	76.1	
05:00 PM - 06:00 PM	76.8	82.5	76.3	

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 2466148
Date Received : Jul 09, 2024
Date Reported : Jul 16, 2024
Report Number : 3020202-1

Page 1 of 2

Sample Number 2466148-1
Sampled Date Jul 09, 2024 10:10 AM
Sample Description Wastewater
Location บึงควายวัดกลางท่าหินระยองโครงการ
Date Analysis Commenced Jul 09, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	31.9	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	768	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part N13 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Page 2 of 2

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 2466148
Date Received : Jul 09, 2024
Date Reported : Jul 16, 2024
Report Number : 3020202-1

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.
Sampling By : Chainusorn Lertmanthakunchai ทรัพย์สินดูแลที่ 3-323-9-9461 , Nachakorn Hansa ทรัพย์สินดูแลที่ 3-204-9-0187

Remark :
- LOD : Limit of Detection
- <LOD : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichok
Chonticha Subongkoch
Scientist (3)
ทรัพย์สินดูแลที่ 3-323-9-9449

Approved by

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Dej Changchon
Senior Manager
ทรัพย์สินดูแลที่ 3-323-9-9452

Technical Management

Chontichok
Chonticha Subongkoch
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ทรัพย์สินดูแลที่ 3-323-9-9449

Approved by

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Sample Number 2478316-1
Sampled Date Aug 13, 2024 10:25 AM
Sample Description Wastewater
Location บึงควายวัดเขาแก้วท่าพระโคตรกาว
Date Analysis Commenced Aug 13, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	32.2	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	620	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part N13 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchanha S.
Photchanha Seeda
Scientist (4)
หมายเลข 7-323-0-0028

Approved by

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Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Sample Number 2478316-1
Sampled Date Aug 13, 2024 10:25 AM
Sample Description Wastewater
Location บึงควายวัดเขาแก้วท่าพระโคตรกาว
Date Analysis Commenced Aug 13, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates. Sampling By : Chainusorn Lertmanthakunchai หมายเลข 7-323-0-0041 , Pattarapol Sawangjallam หมายเลข 7-204-0-0002							
Remark : - LOD : Limit of Detection - <L : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting) - Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025. - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.							

Technical Management

Photchanha S.
Photchanha Seeda
Scientist (4)
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Sample Number 2493689-1
Sample Date Sep 10, 2024 10:25 AM
Sample Description Wastewater
Location บึงควนวัดเขาพัฒนาจังหวัดระยอง
Date Analysis Commenced Sep 10, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	32.2	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	316	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part Nf3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Page 1 of 2



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Phongthep Sithiloh ทรัพย์สินศาสตร์ 3-323-3-0023 , Kardbundi Klitsupavanit ทรัพย์สินศาสตร์ 3-204-3-0001
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Page 2 of 2

Technical Management

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ทรัพย์สินศาสตร์ 3-323-3-0028

Approved by

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Dej Changchon
Senior Manager
ทรัพย์สินศาสตร์ 3-323-3-0001

Technical Management

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Approved by

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Dej Changchon
Senior Manager
ทรัพย์สินศาสตร์ 3-323-3-0001

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24104296
Date Received : Oct 08, 2024
Date Reported : Oct 16, 2024
Report Number : 3105514-1

Page 1 of 2

Sample Number 24104296-1
Sampled Date Oct 08, 2024 2:20 PM
Sample Description Wastewater
Location บึงควนวัดเขาพัฒนาจังหวัดระยอง
Date Analysis Commenced Oct 08, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	32.1	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	178	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.2	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part N13 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchanha S.
Photchanha Seeda
Scientist (4)
หมายเลข 7-323-0-0028

Approved by

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Dej Changchon
Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24104296
Date Received : Oct 08, 2024
Date Reported : Oct 16, 2024
Report Number : 3105514-1

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.
Sampling By : Nattawut Athomprommarat หมายเลข 7-323-0-0006 , Pattarapol Sawangjalilam หมายเลข 7-204-0-0002

Remark :
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- <C> : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Photchanha Seeda
Scientist (4)
หมายเลข 7-323-0-0028

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24114722
Date Received : Nov 12, 2024
Date Reported : Nov 19, 2024
Report Number : 3128714-1

Page 1 of 2

Sample Number 24114722-1
Sampled Date Nov 12, 2024 10:30 AM
Sample Description Wastewater
Location บึงคว่ำวัดเขาพัฒนาจังหวัดระยอง
Date Analysis Commenced Nov 12, 2024
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	32.3	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	218	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part 193 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	44	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

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Approved by

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Dej Changchon
Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24114722
Date Received : Nov 12, 2024
Date Reported : Nov 19, 2024
Report Number : 3128714-1

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Chainusorn Lertranthakunchai โทรศัพท์ ๖-323-๙-0041 , Pattarapol Sawangjittan โทรศัพท์ ๖-204-๙-0002

Remark :
- LOD : Limit of Detection
- <C> : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24128012
Date Received : Dec 10, 2024
Date Reported : Dec 17, 2024
Report Number : 3159925-1

Page 1 of 2

Sample Number	24128012-1						
Sample Date	Dec 10, 2024 10:40 AM						
Sample Description	Wastewater						
Location	นิคมอุตสาหกรรมท่าจีนระยองโครงการ						
Date Analysis Commenced	Dec 10, 2024						
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4530 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	31.4	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	272	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

TESTING
No.0042
Lot ID: 24128012
Date Received : Dec 10, 2024
Date Reported : Dec 17, 2024
Report Number : 3159925-1

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.
Sampling By : Chainusorn Lertmanthakunchai โทรศัพท์ ๖-323-๙-0041 , Pattarapol Sawangjittan โทรศัพท์ ๖-204-๙-0002

Remark :
- LOD : Limit of Detection
- <C> : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 1 of 13

Sample Number	2493692-1
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Vonginyoo
Location	บริเวณด้าน 1 หลัง (ผ้า-บางแดด อยู่บริเวณด้าน : - แดด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดไฟฟ้าวัดอุณหภูมิ #1	120	27.7	25.8	32.0	31.5
Average (WBGT)		27.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot Salameh
Section Head

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 2 of 13

Sample Number	2493692-2
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Vonginyoo
Location	บริเวณด้าน 1 หลัง (ผ้า-บางแดด อยู่บริเวณด้าน : - แดด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดไฟฟ้าวัดอุณหภูมิ #2	120	27.7	25.7	32.2	31.6
Average (WBGT)		27.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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21150
P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692

Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 3 of 13

Sample Number	2493692-3
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Vonginyoo
Location	บริเวณด้าน 1 หลัง (ด้านหลังอาคาร) - แผนก : -

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดอุณหภูมิห้อง #3	120	29.0	27.2	33.1	32.5
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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21150
P/O : D441002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692

Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 4 of 13

Sample Number	2493692-4
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Vonginyoo
Location	บริเวณด้าน 1 หลัง (ด้านหลังอาคาร) - แผนก : -

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดอุณหภูมิห้อง #4	120	28.3	26.4	32.7	32.3
Average (WBGT)		28.3			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 5 of 13

Sample Number	2493692-5				
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Nattakarn Vonginyoo				
Location	บริเวณด้าน 1 หลัง (ด้าน-อาคาร) อุณหภูมิอากาศ : - แทน : -)				

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดอุณหภูมิห้อง #5	120	29.1	26.6	34.9	34.4
Average (WBGT)		29.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 6 of 13

Sample Number	2493692-6				
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Nattakarn Vonginyoo				
Location	บริเวณด้าน 1 หลัง (ด้าน-อาคาร) อุณหภูมิอากาศ : - แทน : -)				

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เครื่องวัดอุณหภูมิห้อง #6	120	28.6	26.9	32.6	32.0
Average (WBGT)		28.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Section Head

Approved by

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Assistant Manager



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 7 of 13

Sample Number	2493692-7
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Yonginyoo
Location	บริเวณด้าน 1 ฟันท์ (ผ้า-บางแดด อยู่บริเวณด้าน : - แดด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านหน้าหลัก HRSG #1	120	30.0	27.8	35.4	34.5
Average (WBGT)		30.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 8 of 13

Sample Number	2493692-8
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Yonginyoo
Location	บริเวณด้าน 1 ฟันท์ (ผ้า-บางแดด อยู่บริเวณด้าน : - แดด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านหน้าหลัก HRSG #2	120	30.2	27.9	35.7	34.9
Average (WBGT)		30.2			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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Analysis / Test Report

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21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 9 of 13

Sample Number	2493692-9
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Yongnyoo
Location	บริเวณด้าน 1 ฟันท์ (ผ้า-งานสกรู บริเวณด้าน : - แทนด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านด้าน HRSG #3	120	29.1	26.7	34.8	34.3
Average (WBGT)		29.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Supt S.

Technical Management

Supot Salameh
Section Head

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S:Reports_Air Heat.rpt (11:19AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 10 of 13

Sample Number	2493692-10
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)
Measurement Date	Sep 16, 2024
Measurement by	Nattakarn Yongnyoo
Location	บริเวณด้าน 1 ฟันท์ (ผ้า-งานสกรู บริเวณด้าน : - แทนด : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านด้าน HRSG #4	120	28.6	26.5	33.5	33.1
Average (WBGT)		28.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 11 of 13

Sample Number	2493692-11				
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Nattakarn Yonginyoo				
Location	บริเวณด้าน 1 หลัง (ผ้า-งานสกรู อุปกรณ์ด้าน : - แทนด : -)				

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านหน้าหลัง HRSG #5	120	29.4	27.1	35.0	34.2
Average (WBGT)		29.4			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082978-1

Page 12 of 13

Sample Number	2493692-12				
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Nattakarn Yonginyoo				
Location	บริเวณด้าน 1 หลัง (ผ้า-งานสกรู อุปกรณ์ด้าน : - แทนด : -)				

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณด้านหน้าหลัง HRSG #6	120	30.4	27.5	37.3	36.4
Average (WBGT)		30.4			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : D41002956
Project Name : Monitoring
Project Location : CUP 1

Lot ID: 2493692
Date Received : Sep 17, 2024
Date Reported : Sep 23, 2024
Report Number: 3082578-1

Page 13 of 13

Sample Number	2493692-13				
Parameter	Heat Stress (Sampling Time : 10.30 AM - 12.30 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Nattakarn Vonginyoo				
Location	บริเวณถนน 1 ฟุต (ใต้-บนอาคาร) ช่วงนี้ : - แทน : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณใต้หลังคาโรง	120	29.1	27.3	33.6	32.3
Average (WBGT)	29.1				
Guideline WBGT (°C)	34.0				

Reference Method : Wet Bulb Globe Temperature

Guideline:

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